DOCUMENT RESUME

ED 355 044 PS 021 249

TITLE	Fire Safety: Protecting Our Children and Families. Hearing before the Select Committee on Children, Youth, and Families. House of Representatives, One Hundred Second Congress, Second Session (August 11, 1992).
INSTITUTION	Congress of the U.S., Washington, DC. House Select Committee on Children, Youth, and Families.
REPORT NO	ISBN-0-16-039722-7
PUB DATE	93
NOTE	131p.; Contains many pages of small type. Photographs will not copy clearly.
AVAILABLE FROM	U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328 (Stock No. 052-070-06836-1, $4.50).
PUB TYPE	Legal/Legislative/Regulatory Materials (090)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Accident Prevention; *Alarm Systems; Children; Death; *Fire Protection; Government Role; Hearings; Injuries; *Safety Education
IDENTIFIERS	Congress 102nd; *Fires; *Fire Safety Education

ABSTRACT

This hearing, chaired by Representative Patricia Schroeder, was held to find ways to reduce the number of deaths and injuries that result from fires. Testimony or prepared statements were given by Representatives Schroeder, Michael Bilirakis, Romano Mazzoli, and Curt Weldon, as well as nine other individuals involved in fire safety issues, including professional fire fighters, members of fire safety groups, and concerned citizens. It was noted that the United States has one of the highest per capita fire death rates in the world, with roughly 6,000 fire deaths each year. Young children are at great risk of death and injury due to fire burns, with nearly 1,400 child fatalities and 14,000 serious injuries each year due to fires. The monetary costs of fires are tremendous, with over $50 billion spent each year on property losses, medical and insurance costs, fire department expenditures, and fire protection costs. Careless smoking and playing with fire cause the most harm to children. Poverty and poor living conditions increase the risk of fire death and injury. Smoke detectors and other safety devices greatly reduce the chances of dying in a fire. Despite the effectiveness of such safety devices, more preventive and educational measures are needed. (MDM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

PS

FIRE SAFETY: PROTECTING OUR CHILDREN AND FAMILIES

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

ED355044

HEARING

BEFORE THE

SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES HOUSE OF REPRESENTATIVES

ONE HUNDRED SECOND CONGRESS

SECOND SESSION

HEARING HELD IN WASHINGTON, DC, AUGUST 11, 1992

Printed for the use of the
Select Committee on Children, Youth, and Families

BEST COPY AVAILABLE

PS 021249

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1993
60-327

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328
ISBN 0-16-039722-7

2

SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES

PATRICIA SCHROEDER, Colorado, *Chairwoman*

GEORGE MILLER, California
WILLIAM LEHMAN, Florida
MATTHEW F. McHUGH, New York
TED WEISS, New York
BERYL ANTHONY, Jr., Arkansas
BARBARA BOXER, California
SANDER M. LEVIN, Michigan
J. ROY ROWLAND, Georgia
GERRY SIKORSKI, Minnesota
ALAN WHEAT, Missouri
MATTHEW G. MARTINEZ, California
LANE EVANS, Illinois
RICHARD J. DURBIN, Illinois
DAVID E. SKAGGS, Colorado
BILL SARPALIUS, Texas
TIM JOHNSON, South Dakota
BARBARA-ROSE COLLINS, Michigan
JOAN KELLY HORN, Missouri
JIM BACCHUS, Florida
DOUGLAS "PETE" PETERSON, Florida
ROBERT E. "BUD" CRAMER, Jr., Alabama

FRANK R. WOLF, Virginia
CLYDE C. HOLLOWAY, Louisiana
CURT WELDON, Pennsylvania
LAMAR S. SMITH, Texas
JAMES T. WALSH, New York
RONALD K. MACHTLEY, Rhode Island
BOB McEWEN, Ohio
MICHAEL BILIRAKIS, Florida
SCOTT L. KLUG, Wisconsin
RICHARD JOHN SANTORUM, Pennsylvania
DAVE CAMP, Michigan
FRANK D. RIGGS, California
BILL BARRETT, Nebraska
HARRIS W. FAWELL, Illinois

Committee Staff

Karabelle Pizzigati, *Staff Director*
Jill Kagan, *Deputy Staff Director*
Carol M. Statuto, *Minority Deputy Staff Director*

CONTENTS

	Page
Hearing held in Washington, DC, August 11, 1992	1
Statement of:	
Brace, Thomas R., vice president, National Association of State Fire Marshals, Washington, DC; Minnesota State Fire Marshal, Department of Public Safety, St. Paul, MN	65
Feely, Herta B., executive director, National SAFE KIDS Campaign, Washington, DC	25
Grant, Allison B., member, Student Leadership Institute, Highland Middle School, Louisville, KY	47
Sanders, Colonel Russell E., chief, Louisville Division of Fire, Louisville, KY	41
Spaulding, Romeo O., president, International Association of Black Professional Fire Fighters; director, Community Relations and Public Fire Safety Education; lieutenant, District of Columbia Fire and Emergency Medical Services Department, Washington, DC	50
Wall, Edward M., deputy administrator, United States Fire Administration, Federal Emergency Management Agency, Washington, DC	14
Prepared statements, letters, supplemental materials, et cetera:	
Bilirakis, Hon. Michael, a Representative in Congress from the State of Florida, opening statement of	83
Brace, Thomas R., vice president, National Association of State Fire Marshals, Washington, DC; Minnesota State Fire Marshal, Department of Public Safety, St. Paul, MN, prepared statement of	68
Feely, Herta B., executive director, National SAFE KIDS Campaign, Washington, DC, prepared statement of	29
Grant, Allison B., member, Student Leadership Institute, Highland Middle School, Louisville, KY, prepared statement of	48
Klugh, Brian, lieutenant, assistant fire marshal, Lancaster Bureau of Fire, Lancaster, PA, prepared statement of	119
Mazzoli, Hon. Romano, a Representative in Congress from the State of Kentucky:	
"Fire chief says deaths, damage down because of department's programs," July 28, 1992, article entitled	13
Opening statement of	10
Sanders, Colonel Russell E., chief, Louisville Division of Fire, Louisville, KY, prepared statement of	43
Schroeder, Hon. Patricia, a Representative in Congress from the State of Colorado and chairwoman, Select Committee on Children, Youth, and Families:	
"Fire Safety: Protecting Our Children and Families," a fact sheet	3
Opening statement of	2
Spaulding, Romeo O., president, International Association of Black Professional Fire Fighters; director, Community Relations and Public Fire Safety Education; lieutenant, District of Columbia Fire and Emergency Medical Services Department, Washington, DC:	
District of Columbia Fire and Emergency Medical Services Department, Community Relations Unit, "Junior Fire Marshal Program"	59
Prepared statement of	55
U.S. Consumer Product Safety Commission, Washington, DC, "Executive Summary of Cigarette Lighter Project"	124
Wall, Edward M., deputy administrator, United States Fire Administration, Federal Emergency Management Agency, Washington, DC:	
"Fire in the United States: An Information Backgrounder from the U.S. Fire Administration," revised July 1992	97

Page

Prepared statements, letters, supplemental materials, et cetera—Continued
Wall, Edward M., deputy administrator, United States Fire Administration, Federal Emergency Management Agency, Washington, DC—Continued
"Kids and Fires," a chart 24
Prepared statement of 17
"Sprinkler Systems Costs" 104
United States Fire Administration, "Heat Detectors vs. Smoke Detectors," August 24, 1992 102
United States Fire Administration, "Latch Key Kids," August 24, 1992 101
Weldon, Curt, a Representative in Congress from the State of Pennsylvania, "Fire Safety: Protecting Our Children and Families," a fact sheet ... 90

FIRE SAFETY: PROTECTING OUR CHILDREN AND FAMILIES

TUESDAY, AUGUST 11, 1992

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES,
Washington, DC.

The select committee met, pursuant to call, at 10:00 a.m., in room 2237, Rayburn House Office Building, Hon. Patricia Schroeder (chairwoman of the select committee) presiding.

Members present: Representatives Schroeder, Martinez, Wolf, Holloway, Weldon, and Bilirakis.

Also present: Representative Mazzoli.

Staff present: Karabelle Pizzigati, staff director; Thomas Brooks, professional staff; Carol Statuto, minority deputy staff director; Larry Huff, research associate; and Joan Godley, committee clerk.

Chairwoman SCHROEDER. We will go ahead and convene this morning. We have a very busy morning and some very distinguished witnesses that we are very happy to have with us this morning.

I am going to put my opening statement in the record. As you know, the select committee has been very concerned about protecting children and families.

When you look at the number of children who died or were injured as a result of residential fires, you find the number astronomically high. Each year we have 1,400 children who are killed and about 14,000 children severely injured because of residential fires and burns.

We find that young children under the age of five are particularly at risk, and over half the childhood deaths are among children under five years old, and their burn rate is twice that of Americans overall.

When we look at low-income families, they seem to be highly at risk. When you add up all the costs to society, it is staggering.

We are going to have some good news from the Louisville Fire Chief about his department's very successful efforts to emphasize prevention first which is what this committee thinks is the direction in which we should be going and what we should be focusing on a lot more. We have some very fine witnesses with us.

I am going to put the rest of my statement in the record.

Yesterday the House did pass the Federal Fire Safety Act of 1992 trying to get more smoke detectors and sprinklers in federally-assisted housing units and other areas. So we hope everybody will try

to play catch-up ball in whatever area they possibly can to emphasize prevention.

[Opening statement of Hon. Patricia Schroeder follows:]

OPENING STATEMENT OF HON. PATRICIA SCHROEDER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO AND CHAIRWOMAN, SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES

Today, the select committee will examine one of the most serious injury threats to children and families, and the number one danger to children in the home—fire and burns. Each year, roughly 1,400 children die and 14,000 are injured as a result of residential fires and other burns.

Fires devastate families by killing children and adults and destroying homes. Young children under five years of age are at particular risk, accounting for over half of childhood deaths and having more than twice the death rate from burns as the average American. In addition to being the second leading cause of childhood death, fire and burns constitute the most painful non-fatal injuries to children, leaving long-lasting physical and emotional scars.

Children in low-income families are at heightened risk of dying in a residential fire—housefire death rates are almost five times higher in areas of low per-capita income as in high-income areas. Among African-American and Native American children, housefire death rates are more than twice the rate for white children. Outmoded heating, bad wiring, dangerously hot tap water, and too few smoke detectors place low-income children at extreme risk for burns.

The costs incurred to families and society from fire and burn injuries are staggering. Experts estimate that burns among children alone produce annual price tags of half a billion dollars in medical costs, nonmedical services, and personal and societal losses. Estimates which include pain and suffering reach $3.5 billion. Placing a dollar value on fire and burn injuries, however, cannot explain the human loss in a family that has lost a child to a fire or in a child who must cope with painful burn therapy for the rest of his or her life.

Despite the extreme toll taken by fire and burns, fire prevention officials report that nearly every fire-related injury can be avoided by adequate preventive measures and education. Wider availability of smoke detectors and sprinklers, product improvements in making sleepwear and furniture flame-resistant, lowering the ignition potential of cigarettes, and improved education for children and adults all have been identified as effective steps toward reducing the threat of fire and burns.

For many years, response to fire meant primarily fire suppression—the response to a fire in progress. In recent years, however, fire prevention has increasingly been adopted by fire departments around the nation as a key cost-effective and life-saving priority for fighting fire. As a result, many fire departments, schools, and communities have instituted individual programs to expand smoke detector use or educate young children in schools. Yet, despite this progress, too few communities have initiated truly comprehensive efforts to address the problem in multiple ways and at all age levels.

Today we will hear from the Louisville, Kentucky fire chief about his department's successful efforts to emphasize "prevention first" and how working in the community to reduce the threat of fire led to significant reductions in civilian and firefighter injuries. A unique aspect of the Louisville approach is the department's fire prevention and education partnership with young people. We will hear also from a student who has been active in this effort.

I caution against a tendency to express this issue solely in terms of "careless human behavior." We know that education is an important tool in fire prevention; we also know that working smoke detectors and product improvements ensure permanent protection from fire. Only by employing both approaches can we provide the best possible fire prevention strategy.

I am concerned that federal response has not been as effective as possible. Yesterday, the House passed H.R. 3360, the Federal Fire Safety Act of 1992. This bill, as introduced, would have set substantive requirements for smoke detectors and sprinklers in federally assisted housing units. To move the legislation and pass it, however, the bill was changed to provide only some of the fire protection it earlier offered.

I want to thank my select committee colleague, Representative Weldon, the Chairman of the Congressional Fire Services Caucus, for bringing this issue to the committee's attention.

I welcome all of our witnesses. Fire and burn deaths and injuries are preventable. I look forward to learning what we can do to increase the progress being made to address this issue.

FIRE SAFETY: PROTECTING OUR CHILDREN AND FAMILIES

A FACT SHEET

FIRE ENDANGERS THOUSANDS, MOST OFTEN AT HOME

- The United States has one of the highest fire death rates, per capita, in the world. The rate of U.S. fire deaths is almost twice the average of other industrialized countries. (United States Fire Administration [USFA], 1992)

- Nine out of ten fire and burn deaths from 1980 through 1986 occurred in the home. Of the 6,000 fire deaths each year, over 80% occur in residential fires. Residential fires are the leading cause of death from injury for children in 11 states -- Delaware, Illinois, Maine, Maryland, Michigan, New Jersey, Pennsylvania, South Carolina, Vermont, Virginia, and West Virginia. Residential fires account for three-quarters of fire deaths and two-thirds of fire injuries to non-firefighters. One- and two-family dwellings account for 68% of residential deaths and 62% of residential injuries. (Baker, et al., 1992; USFA, 1990, 1992; National SAFE KIDS Campaign [SAFE KIDS], 1992)

- Among both African Americans and Native Americans, housefire death rates are more than twice the rate for whites. In these groups, the rates are high among young children and increase throughout the adult years. However, racial differences in housefire death rates diminish in higher-income areas. (Baker, et al., 1992)

YOUNG CHILDREN AT GREAT RISK OF DEATH AND INJURY DUE TO FIRE, BURNS

- In 1989, fire and burns killed 1,454 children age 19 and under, at a rate of 2.0 deaths per 100,000. More than half (759, 52%) were children under five, killed at a rate of 4.0 per 100,000. From 1985 through 1989, children under five had more than twice the fire death rate of the population overall. Only adults over 74 had a higher rate. (National Center for Health Statistics, unpublished; Census, 1990; National Fire Protection Association [NFPA], 1992)

- Fire and burn injuries rank second only to motor vehicle crashes as the leading cause of death for children ages 1-4 and are the third leading cause of injury and death for all children under age

20 after motor vehicle crashes and drownings. (McLoughlin and McGuire, 1990)

- Children under age 5 are at the highest risk of nonfatal burns (two-thirds from hot-liquid scalds) resulting in hospitalization. An estimated 70% of children under age 5 who are hospitalized for burns are burned by hot liquids. (Burn Foundation, 1988; Centers for Disease Control [CDC], 1990)

- In 1990, approximately 14,000 children under age 15 were hospitalized for burn injuries, and spent an estimated combined 104,000 days in hospitals. For every child hospitalized for burns, about 15 children obtain outpatient care for a burn injury. (Kozak, unpublished; CDC, 1990)

FIRES AND BURNS TAKE COSTLY TOLL

- One study estimated lifetime costs of fire and burn injuries to children under age 15 in 1985 at $592 million, including the amounts spent for medical care and nonmedical services ($217 million), and the value of losses to society due to premature death ($319 million) or inability to work or to keep house over a lifetime ($56 million). Over half ($326 million) of this cost applied to children under five. Initial medical costs alone from burns to children ages 0-19 have been estimated at $165 million annually. (Rice and MacKenzie, 1989; Malek, et al., 1991)

- A 1990 study, which sets a dollar value for pain and suffering, estimated the annual cost of fire and burn deaths and injuries to children under age 20 at $3.5 billion in societal losses due to medical care, disability, pain and suffering, and other costs. The study estimated that children killed by fire annually lose over 100,000 years in life expectancy. (McLoughlin and McGuire, 1990)

- A survey of costs incurred from 1,242 pediatric burn center admissions from 1987 through 1990 revealed that charges averaged $22,700 per case and were estimated to cost approximately $7 million annually. (McLoughlin and Brigham, 1992)

- The cost of fire -- property losses plus the cost of fire protection equipment, fire departments, and insurance overhead -- is more than $50 billion a year. Residential fires alone account for over $5 billion in annual property losses. (USFA, 1992; SAFE KIDS, 1992)

CARELESS SMOKING AND PLAYING WITH FIRE CAUSE MOST HARM TO CHILDREN

- The leading three causes of residential fires in 1988 were heating, cooking, and arson. Careless smoking was the leading cause of residential fire fatalities, followed by arson and heating. (USFA, 1990)

- Cigarettes, which are the ignition source of 35% of all fatal fires, cause 14% of the fires that kill children younger than 15 years of age. A three-year survey of Baltimore house fires found that 31% of child victims died in cigarette-induced fires, and that 39% of the persons who died in these fires were not the cigarette smokers themselves. A King County, Washington, study found that daily consumption of 10-19 cigarettes increased a household's odds of fire injury by 6.6 times over a non-smoking household. (McLouglin and McGuire, 1990; Mierley and Baker, 1983; Ballard, Koepsell, and Rivara, 1992)

- Children playing with fire account for nearly 100,000 reported fires, 300 deaths, 4,000 injuries, and nearly $2 million in damages every year. Ten percent of residential fire deaths are attributed to children playing with matches, cigarette lighters, or other ignition sources. Fires started by children playing with matches or lighters are the leading cause of fire deaths among children under age 5, accounting for more than one-third (34%) of fire deaths, followed by heating (14%) and arson (13%). (USFA, 1990, 1992; Baker, et al., 1992; SAFE KIDS, 1992)

- A study of rural North Carolina residential fires found that, although heating was the leading cause of all fires, those caused by smoking were more likely to be fatal. The risk of fatality was greatest in fires involving mobile homes, homes without smoke detectors, and alcohol-impaired persons. (Runyan, in press)

HEIGHTENED RISK OF FIRE DEATH AND INJURY ASSOCIATED WITH POVERTY AND POOR LIVING CONDITIONS

- Housefire death rates are highest in the East, especially the Southeast, which has the highest proportion of any region's population living in poverty and where kerosene heaters and other noncentral heating equipment are widely used. (Baker, et al., 1992; SAFE KIDS, 1992)

- For all races combined, housefire death rates are almost five times

higher in areas of low per-capita income as in high-income areas. (Baker, et al., 1992)

- Children in low-income families are at greater risk of dying in a house fire than their higher-income counterparts. One study found a very strong association between poverty status and the incidence of hospitalization for burns. Researchers cite outmoded heating, bad wiring, dangerously hot tap water, too few smoke detectors, and inadequate parental supervision due to economic constraints as reasons for poverty-related burns. (McLoughlin and McGuire, 1990; Locke, et al., 1986; Athey and Kavanagh, 1991)

- Cities with higher levels of poverty have higher rates of residential fires and deaths in residential fires, and low-income neighborhoods in several cities have been found to have higher rates than their high-income counterparts. (Fahy and Norton, 1989)

SMOKE DETECTORS, OTHER PREVENTION MEASURES EFFECTIVE IN REDUCING RISK OF FIRE INJURIES

- The housefire death rate has decreased 19% since 1977, due in part to the role of smoke detectors. This reverses the trend from 1930 to 1980, during which period the rate increased 32%. (McLouglin and Brigham, 1992)

- The risk of dying in a house fire is halved in homes with operable smoke detectors. Effectiveness evaluations have revealed that smoke detectors reduced the potential of death in 86% of fires and the potential of severe injuries in 88% of fires. (Rice and MacKenzie, 1989; National Committee for Injury Prevention and Control [NCIPC], 1989)

- The effectiveness of smoke detectors is increased if a sprinkler system also is used, thereby reducing the spread of a fire. In a study of New York City high-rise buildings, sprinklers were rated over 98% effective in suppressing and extinguishing fires. (NCIPC, 1989)

- The Louisville, Kentucky fire department's mission to promote fire prevention and education, instituted in 1986, is credited with reducing fire injuries among civilians by 50% and among firefighters by 45%, and saving $1.5 million in annual property loss and $182,000 in firefighter overtime spending. (Sanders, 1992)

DESPITE EFFECTIVENESS, MORE PREVENTION AND EDUCATION NEEDED

- Sixty-four percent of residential fire deaths overall occur in the 18% of homes without at least one smoke detector. Yet, one-third of the smoke detectors in U.S. households do not function due to dead or missing batteries. (USFA, 1992; CDC, 1992)

- Without a smoke detector and fire safety education, families may underestimate the dangers of smoke and poisonous gases associated with fire. Only 26% of fire victims die as a result of burns; 74% die from smoke inhalation and a lack of oxygen. (SAFE KIDS, 1992)

- An assessment of 285 third-grade students' fire safety knowledge revealed that, in 66% of items asked, the percentage of wrong answers exceeded the percentage of correct responses. (Frederick and White, 1989)

- A 1991 national injury control conference produced the following priority recommendations to reduce fire and burn injuries -- lowering cigarette ignition potential and developing and enforcing residential smoke detector requirements, sprinklers in new housing, and antiscald devices in hot water systems. (CDC, 1992)

August 11, 1992

Chairwoman SCHROEDER. We are also very pleased to have joining us this morning the Congressman from Kentucky, Ron Mazzoli. I would like to yield to him.

Mr. MAZZOLI. Thank you, Madam Chair. I appreciate your kind offer to sit with your panel. Let me commend you for the excellent work that you have done as chair of this particular committee and also in your career in Congress. We have been colleagues in the Judiciary Committee for some years, and you do excellent work.

Madam Chair, if at some point I might be able to introduce Chief Sanders and Ms. Grant who will be the witnesses.

Chairwoman SCHROEDER. Sure. Please do.

Mr. MAZZOLI. Thank you very much.

The panel consists of many outstanding people, but two of them happen to be from Louisville, which is the district I am pleased to represent. Colonel Russell Sanders is the Chief of the Louisville Division of Fire, and Ms. Allison Grant is a student at Highland Middle School in Louisville.

Chief Sanders has been a member of the Louisville Fire Division since 1967 when he was only 17 years old. He was named chief in 1986 and was its youngest chief in history, I think then only 36 years old.

Madam Chair, I think what distinguishes Russell Sanders is his devotion to education. I would like, with your permission, to put in the record an article that was written by the University of Louisville about Russell.

Chairwoman SCHROEDER. Without objection.

[The article, "Chief Sanders Fights Fires With Education and Water," from the University of Louisville Alumni Magazine, Vol. 11, No. 1, Summer 1992, is retained in committee files.]

Mr. MAZZOLI. Thank you very much.

The caption is very noteworthy. It says, "Chief Sanders Fights Fires with Education and Water." That was the phrase used by the magazine. It stemmed from the fact that when Russell was a young enlistee in the Army in Vietnam he realized then how important an education was.

So when he came back to Louisville, for the next 18 years, Madam Chair, Russell was enrolled at the University of Louisville where he earned a Bachelor's Degree in Psychology with high honors in 1976, a Master's Degree in education and counseling also with high honors in 1980, and then finally, in 1988, a second Master's Degree in Community Development and Public Administration.

Madam Chair, all the time he was working as a firefighter and eventually became Chief in 1986 and, with the help of his wonderful wife, raised a very fine family.

As the Chairwoman has mentioned, a feature of Russell's leadership has been a devotion to fire prevention—not to just fight them with technical expertise but to avoid them. There is a story in our Courier Journal which notes the rather steep drop-off in damages and injuries and deaths occurring from fire on the Chief's watch.

Then we have Allison Grant, whom I just met this morning, who is a wonderful young lady and a student at the Highland Middle School and has been actively involved in the Highland Student Leadership Institute. She comes here with her Vice Principal, Kevin Stevenson. She has worked in conjunction with Chief Sanders of the Louisville Fire Division, and we will hear more about their work, Madam Chairwoman, on how to prevent fire and about various forms of fire safety.

I want to thank the Chairwoman for the hearings and welcome our two friends from Louisville.

[Opening statement of Hon. Romano Mazzoli follows:]

PREPARED STATEMENT OF HON. ROMANO MAZZOLI,
A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KENTUCKY

Madam Chairman:

I commend you for holding this hearing on the very important topic of fire safety. Raising awareness of the need for safeguarding our children and families from the destruction of fires is of great value.

I am proud and pleased that this morning's witness panel includes two Louisvillians: Colonel Russell E. Sanders, Chief of the Louisville Division of Fire; and Miss Allison Grant, a student at Highland Middle School.

Colonel Sanders, a member of the Louisville Division since 1967, was named Chief in 1986 at the age of 36. At that age, I might note, he is the youngest to be named Chief in the history of the Division.

"Fights fires with education and water" is the phrase used in a cover story on Chief Sanders, that appeared in the summer edition of the University of Louisville Alumni Magazine.

He learned as a soldier in Vietnam the value of an education. Upon his return home, he entered the University of Louisville and was enrolled for 18 consecutive years.

In these years, Russ earned a Bachelor's degree in psychology, was named to the Dean's List and graduated with honors in 1976. In 1980, he earned a Master's degree in education, specializing in personnel services, graduating with high honors. Again with high honors, in 1987, he earned a second Master's degree, majoring in community development. Throughout Russ's school career, he was a member of the Louisville Division and with the solid help of his wife, raised two fine sons.

Under the leadership of Chief Sanders, in the last five years, there has been a dramatic decline in the number of deaths and injuries and in property damage caused by fires in Louisville and Jefferson County. A focus on fire prevention, including a give-away of smoke detectors and an agressive public awareness campaign, accounts for this significant decrease.

I know Madam Chairman and the distinguished members of the Committee look forward to the Chief's testimony.

BEST COPY AVAILABLE

Madam Chairman, I am also pleased that the Committee will have the opportunity this morning to hear from Allison Grant, who is actively involved in her school's Student Leadership Institute.

In collaboration with the Louisville Division, the Institute works to promote fire safety in our neighborhoods in Louisville. I am sure the Committee salutes her for her personal commitment, and is anxious to learn of the Institute's efforts on behalf of families.

C-J
7-28-92

Fire chief says deaths, damage down because of department's programs

By SHELDON SHAFER
Staff Writer

Fire-prevention and public-awareness efforts by the Louisville Fire Department apparently have resulted in a dramatic decline in deaths, injuries and property damage caused by fires.

Fire Chief Russell Sanders, who changed the division's mission from fire suppression to fire prevention when he took office in 1986, said yesterday that he believes the improvements came from advances in training, better equipment, a massive giveaway of smoke detectors and a vigorous public-awareness program on fire safety.

■ From 1980 to 1985, 86 people died in Louisville fires; but 21 fewer people died in the six-year period from 1986 through 1991.

■ An average of $10 million a year in lost property was reported from 1980 to 1985, but that dropped to $8.5 million from 1986 to 1991.

Louisville residents' fire insurance costs have been relatively low for years. In fact, Louisville was one of only six cities in 1973 to earn a national rating service's top grade for fire suppression, a rating it has never lost from the Insurance Services Office.

STAFF CHART BY STEVE SUMNER

Fire officials acknowledge that Louisville's population has declined by nearly 30,000 since 1980. But Sanders said he believes the main reason for improved fire safety statistics is that nearly every dwelling now has a smoke detector, including about 40,000 that the city has distributed since 1985.

In addition, the annual Great Louisville Fire Drill, started in 1985, now attracts about 15,000 children each October. Mayor Jerry Abramson usually conducts four "firehouse chats" a year, where neighborhoods are invited to a fire station to learn about fire safety.

And, under a home inspection program started last fall, city firefighters have visited about 18,000 homes. In more than a fourth of those they have checked wiring, smoke detectors, emergency escape plans and other fire-safety factors. Information about fire safety was left at most of the other residences.

Since the mid-1980s the number of city firefighters has hovered around 545, and the division's annual operating budget has increased only with inflation, from $18.6 million in fiscal 1987 to $25.4 million in 1992.

Richard Carlson, Okolona volunteer district fire chief and president of the Jefferson County Fire Chiefs Association, said many of the county's 21 volunteer districts have noticed similar trends in better fire safety. The number of runs has been "creeping down" and property loss is down sharply.

BEST COPY AVAILABLE

Chairwoman SCHROEDER. Thank you very much.

Let me call the first panel to the table. Edward Wall, Deputy Administrator, United States Fire Administration, Federal Emergency Management Agency, Washington, DC; Herta B. Feely, Executive Director, National SAFE KIDS Campaign, Washington, DC.

We have just had Chief Russell Sanders introduced and welcome him up.

Also, we have Allison B. Grant, Member, Student Leadership Institute, Highland Middle School, Louisville, Kentucky; Romeo O. Spaulding, President, International Association of Black Professional Fire Fighters; Director, Community Relations and Public Fire Safety Education; Lieutenant, District of Columbia Fire and Emergency Medical Services Department, Washington, DC; and Thomas R. Brace, Vice President, National Association of State Fire Marshals, Washington, DC; Minnesota State Fire Marshal, Department of Public Safety, St. Paul, Minnesota. We will put all of your statements in the record.

We do think that fire safety is one of the things that is so critically important, and somehow we just do not focus enough on and talk enough about. We are hoping to have good news we can use out of Louisville on how to do that and from the rest of United States on how we can start doing more.

Chairwoman SCHROEDER. Mr. Wall, your statement is in the record. If you would like to summarize, the floor is yours.

STATEMENT OF EDWARD M. WALL, DEPUTY ADMINISTRATOR, UNITED STATES FIRE ADMINISTRATION, FEDERAL EMERGENCY MANAGEMENT AGENCY, WASHINGTON, DC

Mr. WALL. Thank you.

Good morning. I am Edward Wall, the Deputy Administrator of the United States Fire Administration. It is an honor to testify before you today on the Federal fire initiatives to protect our children and our families. Mr. Olin Greene, the Administrator, had a desire to be here today but is attending a conference on civil disorders in St. Louis.

I want to commend the committee for focusing on this serious national fire problem. While fire deaths have decreased significantly over the past decade and a half, the United States still has one of the highest fire death rates per capita in the industrial world. Each year fire kills more Americans than all other natural emergencies combined including floods, hurricanes, tornadoes and earthquakes.

If we are to protect our children and families from fire we must begin by making our homes more fire safe. That means changing behaviors and providing built-in fire protection systems. Of the nearly 6,000 fire deaths in the United States each year, at least 80 percent occur in residential fires.

I would like to use a chart to illustrate the problem of kids in fires. Mr. Coyle, the Assistant Administrator, will help me.

Of every 100 people in the United States, 16 are children. Of every 100 people who die in fires in the United States, 23 are children. Of every 100 children who die in fires in the United States, 21 are killed because of children playing with fire. Of every 100

people who died in child-set fires in the United States, tragically 85 are children. Of every 10 fires, fire experts tell us eight of those fires are preventable.

I am here today to talk about ways we can work to prevent the majority of those fires. One thing is certain: Americans need better home fire safety. At least 85 percent of fire deaths can be attributed to human behavior. Nothing is more important than the quality of care we provide for our children. Economic pressures have led us to increase the number of children at home with no parental supervision.

Given social realities like latchkey children, we must push for fire safety measures like sprinklers that can save lives under any circumstance. At the same time, we must step up our efforts in public fire education. Other witnesses today will highlight the specific efforts under way in public fire education.

I would like to address the role the United States Fire Administration plays in national efforts to promote residential fire safety and to protect our children and our families.

The United States Fire Administration coordinates Americans' fire response and public fire education efforts at the Federal level. We use a systems approach to residential fire safety that encompasses public education and awareness, fire codes, fire detection systems such as smoke detectors and residential sprinkler systems. This approach has many components but only one objective: To protect our citizens and our communities by reducing the threat of fire.

Even though the focus of today's hearing is on fire safety for children, we must consider the problem of fire safety in its totality. How can we best take this country to a new level of fire safety?

First, we must change the way we react to residential fires. A house fire is still looked upon as something that happens to someone else. In fact, it can happen to any of us. We must all accept personal responsibility for making our homes fire safe. Parents and care givers must be made more aware of the involvement of children in the fire problem. Nearly 25 percent of the fires that kill young children are started by children themselves.

The United States Fire Administration has conducted several successful projects targeted at children, including Children Set Fires, Sesame Street Fire Safety and the Juvenile Fire Setter. We provide support for an outstanding program called SAFE KIDS.

In cooperation with the National Fire Protection Association we are promoting Test Your Detector as the theme of this year's National Fire Week observed from October 4 to 10. Citizens will be encouraged to use this observance as a time to start a regular pattern of monthly home safety checks.

Fire detectors can help save lives but only if they are working. Even though 88 percent of American homes have at least one smoke detector, one-third of them don't work due to dead or missing batteries. Several national public awareness campaigns are under way to encourage people to maintain their smoke detectors.

While smoke detectors are vital in providing an early warning of fire, only residential sprinklers extinguish that fire. The United States Fire Administration has been in the forefront of national efforts to develop and promote residential sprinkler systems. In my

mind, there is no more powerful deterrent to the residential fire problem than the residential sprinkler. Quick-acting sprinklers offer a means to dramatically reduce fire losses, both of life and property.

As a result of our aggressive research, demonstration and information programs, we have witnessed a tremendous increase in interest and support for sprinkler systems, but the majority of Americans are still not protected by quick-acting residential sprinklers.

No focus on fire safety is complete without a tribute to America's fire service. This nation has no greater resource than the men and women of the fire service. For a nation in need of role models, they are a source of inspiration. For a nation in need of loving care, they are the angels of mercy who risk their lives to save others. They work long hours to bring lessons of fire education into every school. They deserve our support and, indeed, our gratitude.

Madam Chair, the United States Fire Administration is committed to keeping the public informed. We need your help in improving public attitudes and improving the quality of life for those most at risk from fire. We succeed in this mission when a family sleeps well at night knowing their house is protected from fire and when our schools, places of worship, and workplace and recreation sites are fire safe.

Thank you for this opportunity this morning.

Chairwoman SCHROEDER. Thank you very much, Mr. Wall. That was very helpful.

[Prepared statement of Edward M. Wall follows:]

PREPARED STATEMENT OF EDWARD M. WALL, DEPUTY ADMINISTRATOR, UNITED STATES FIRE ADMINISTRATION, FEDERAL EMERGENCY MANAGEMENT AGENCY, WASHINGTON, DC

GOOD MORNING MADAM CHAIR AND MEMBERS OF THE COMMITTEE. I AM EDWARD M. WALL, DEPUTY ADMINISTRATOR OF THE UNITED STATES FIRE ADMINISTRATION IN THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA). IT IS AN HONOR TO TESTIFY BEFORE YOU TODAY ON FEDERAL FIRE INITIATIVES AND ACTIVITIES TO PROTECT OUR CHILDREN AND FAMILIES.

I COMMEND THE COMMITTEE FOR TAKING THE TIME TO FOCUS ON A SERIOUS BUT OFTEN IGNORED PROBLEM. WHILE FIRE DEATHS HAVE DECREASED SIGNIFICANTLY OVER THE PAST DECADE AND A HALF, THE UNITED STATES STILL HAS ONE OF THE HIGHEST FIRE DEATH RATES, PER CAPITA, IN THE INDUSTRIALIZED WORLD. EACH YEAR FIRE KILLS MORE AMERICANS THAN ALL OTHER NATURAL HAZARDS COMBINED, INCLUDING FLOODS, HURRICANES, TORNADOES, AND EARTHQUAKES.

THE SEVERITY OF THE PROBLEM LIES PRIMARILY IN THE INCIDENCE OF RESIDENTIAL FIRES. OF THE NEARLY 6,000 FIRE DEATHS IN THE UNITED STATES EACH YEAR, AT LEAST 80 PERCENT OCCUR IN RESIDENTIAL FIRES. PERHAPS EVEN MORE DISTURBING, THE RISK OF DEATH BY FIRE FOR CHILDREN UNDER AGE FIVE IS MORE THAN TWO TIMES THE NATIONAL AVERAGE FOR OTHER AGES. IF THAT CHILD IS AFRICAN-AMERICAN AND UNDER AGE FIVE, THE RISK OF DEATH IS THREE TIMES THE NATIONAL AVERAGE FOR ALL OTHER AGES.

I WOULD LIKE TO USE A CHART TO PUT THE PROBLEM OF KIDS AND FIRES IN PERSPECTIVE:

- OF EVERY 100 PEOPLE IN THE UNITED STATES, 16 ARE CHILDREN.
- OF EVERY 100 PEOPLE WHO DIE IN FIRES IN THE

UNITED STATES, 23 ARE CHILDREN.

- OF EVERY 100 CHILDREN WHO DIE IN FIRES IN THE UNITED STATES, 24 ARE KILLED BECAUSE OF CHILDREN PLAYING WITH FIRE.
- OF EVERY 100 PEOPLE WHO DIE IN CHILD-SET FIRES IN THE UNITED STATES, 85 ARE CHILDREN.
- OF EVERY 10 FIRES, FIRE EXPERTS SAY THAT 8 ARE PREVENTABLE.

TWO RECENT LOCAL AREA FIRES TRAGICALLY AND DRAMATICALLY ILLUSTRATE THE PROBLEM OF RESIDENTIAL FIRES. ON APRIL 26TH OF THIS YEAR, THREE SMALL CHILDREN AND AN INFANT DIED IN A FIRE IN OXON HILL, MARYLAND. THE FIRE STARTED FROM A POT LEFT ON THE STOVE AND SPREAD THROUGHOUT THE HOUSE, KILLING THE CHILDREN WHO WERE BEING WATCHED BY AN EIGHT YEAR-OLD RELATIVE. LATE LAST MONTH, TWO YOUNG CHILDREN LOST THEIR LIVES IN A FIRE HERE IN THE DISTRICT OF COLUMBIA.

HUNDREDS OF THOUSANDS OF PEOPLE READ ABOUT THE FIRES OR WATCHED THE TELEVISION FOOTAGE AS FIREFIGHTERS SOUGHT TO SAVE THE CHILDREN. I AM SURE MANY PEOPLE WONDERED WHAT WENT WRONG. WHAT CAN WE DO TO AVOID THESE NEEDLESS TRAGEDIES? PART OF THE ANSWER LIES IN EFFORTS TO MAKE OUR HOMES MORE SAFE FROM THE THREAT OF FIRE.

AMERICANS NEED BETTER HOME FIRE SAFETY. AT LEAST 85 PERCENT OF FIRE DEATHS CAN BE ATTRIBUTED TO HUMAN BEHAVIOR. IF WE ARE TO STEM THE TIDE OF FIRE TRAGEDIES -- LIKE THOSE IN OXON HILL AND THE DISTRICT -- THEN WE MUST RECOGNIZE THAT MOST FIRES ARE PREVENTABLE AND MOST FIRE DEATHS ARE NEEDLESS.

NOTHING IS MORE IMPORTANT THAN THE QUALITY OF CARE WE PROVIDE FOR OUR CHILDREN. ECONOMIC PRESSURES HAVE LED TO INCREASING NUMBERS OF CHILDREN LEFT AT HOME WITH NO PARENTAL SUPERVISION. GIVEN SOCIAL REALITIES LIKE LATCHKEY CHILDREN, WE MUST STEP UP OUR EFFORTS TO INCREASE PUBLIC AWARENESS OF THE NEED FOR FIRE EDUCATION AND SPRINKLER PROTECTION WITHIN THE HOME.

OTHER WITNESSES TODAY WILL HIGHLIGHT SPECIFIC EFFORTS UNDERWAY IN PUBLIC FIRE EDUCATION. I WOULD LIKE TO ADDRESS THE ROLE WE PLAY IN NATIONAL EFFORTS TO PROMOTE RESIDENTIAL FIRE SAFETY FOR OUR CHILDREN AND FAMILIES. COORDINATION OF AMERICA'S FIRE RESPONSE AND PUBLIC FIRE EDUCATION EFFORTS ARE CARRIED OUT AT THE FEDERAL LEVEL BY THE U.S. FIRE ADMINISTRATION. WE USE A SYSTEMS APPROACH TO RESIDENTIAL FIRE SAFETY THAT ENCOMPASSES PUBLIC EDUCATION AND AWARENESS; FIRE CODES; FIRE DETECTION SYSTEMS, SUCH AS SMOKE DETECTORS, AND RESIDENTIAL SPRINKLER SYSTEMS. THE APPROACH HAS MANY COMPONENTS, BUT ONLY ONE OBJECTIVE: TO REDUCE THE THREAT OF FIRE.

WHILE THE CURRENT LOSS OF LIFE AND PROPERTY FROM FIRE IS TOTALLY UNACCEPTABLE, THERE IS SOME ENCOURAGING NEWS. FIRE PREVENTION EFFORTS AND IMPROVED FIRE-SAFE HOME CONSTRUCTION HAVE LED TO A 20 PERCENT DECREASE IN THE NUMBER OF FIRES REPORTED BY UNITED STATES FIRE DEPARTMENTS SINCE 1975. THOSE SAME FACTORS, PLUS IMPROVED FIREFIGHTING TECHNOLOGY AND RESCUE TECHNIQUES, HAVE CUT BY HALF THE NUMBER OF FIRE DEATHS TODAY AS COMPARED TO 1971. DESPITE THE GAINS

MADE IN PREVENTING FIRE DEATHS AND LOSSES, WE HAVE REMAINED AT AN UNACCEPTABLE PLATEAU OF ABOUT 6,000 FIRE DEATHS FOR THE PAST SEVERAL YEARS.

HOW CAN WE BEST TAKE THIS COUNTRY TO A NEW LEVEL OF FIRE SAFETY? FIRST WE MUST CHANGE THE WAY WE REACT TO RESIDENTIAL FIRES. A HOUSE FIRE IS STILL LOOKED UPON BY MANY AS SOMETHING THAT HAPPENS TO SOMEONE ELSE. IN FACT, IT CAN HAPPEN ANYWHERE, TO ANY ONE OF US. WE MUST ACT AS IF THE WORST COULD HAPPEN -- BECAUSE IT JUST MIGHT.

IF WE ARE TO CHANGE PUBLIC ATTITUDES, CITIZENS MUST ACCEPT THEIR RESPONSIBILITY FOR THE SOLUTION. THE AMERICAN PUBLIC IS THE SINGLE GREATEST RESOURCE IN FIRE PREVENTION EFFORTS; THEIR INVOLVEMENT AND COMMITMENT TO FIRE SAFETY MUST BE MORE STRONGLY ENCOURAGED.

TOWARD THIS END, PARENTS AND CAREGIVERS MUST BE MADE AWARE OF THE SIGNIFICANT INVOLVEMENT OF CHILDREN IN THE FIRE PROBLEM. FOR EXAMPLE, CHILDREN PLAYING WITH FIRE ACCOUNT FOR NEARLY 100,000 REPORTED FIRES, 300 DEATHS, 4,000 INJURIES AND NEARLY $2 MILLION IN DAMAGES EVERY YEAR.

IN KEEPING WITH FEMA'S MANDATE TO REACH THESE HIGH RISK GROUPS, THE U.S. FIRE ADMINISTRATION HAS CONDUCTED SEVERAL SUCCESSFUL PROJECTS TARGETED AT CHILDREN, INCLUDING, "CURIOUS KIDS SET FIRES," "SESAME STREET FIRE SAFETY," AND "JUVENILE FIRESETTER." WE PROVIDE SUPPORT

FOR THE OUTSTANDING "SAFE KIDS" PROGRAM YOU WILL HEAR MORE ABOUT TODAY. SUPPLEMENTING THE PUBLIC FIRE EDUCATION CAMPAIGN PUBLICATIONS, WE HAVE DEVELOPED SEVERAL PUBLIC SERVICE ANNOUNCEMENTS TARGETED AT THESE GROUPS AS WELL.

IN COOPERATION WITH THE NATIONAL FIRE PROTECTION ASSOCIATION, WE ARE PROMOTING "TEST YOUR DETECTOR - IT'S SOUND ADVICE" AS THE THEME OF THIS YEAR'S NATIONAL FIRE PREVENTION WEEK OBSERVANCE, SCHEDULED OCTOBER 4 - 10. CITIZENS WILL BE ENCOURAGED TO USE THIS OBSERVANCE AS A TIME TO START A REGULAR PATTERN OF MONTHLY HOME SAFETY CHECKS. FIRE DETECTORS SAVE LIVES, BUT ONLY IF THEY ARE WORKING. EVEN THOUGH 82 PERCENT OF AMERICAN HOMES HAVE AT LEAST ONE SMOKE DETECTOR, ONE-THIRD OF THEM DO NOT OPERATE, MOST OFTEN BECAUSE OF DEAD OR MISSING BATTERIES. THE UNITED STATES FIRE ADMINISTRATION HAS SEVERAL NATIONAL PUBLIC AWARENESS CAMPAIGNS UNDERWAY TO ENCOURAGE PEOPLE TO MAINTAIN THEIR SMOKE DETECTORS.

WHILE SMOKE DETECTORS ARE VITAL IN PROVIDING AN EARLY WARNING OF FIRE, RESIDENTIAL SPRINKLERS EXTINGUISH THE FLAMES. THE UNITED STATES FIRE ADMINISTRATION HAS BEEN IN THE FOREFRONT OF NATIONAL EFFORTS TO DEVELOP AND PROMOTE RESIDENTIAL SPRINKLER SYSTEMS. IN MY MIND, THERE IS NO MORE POWERFUL DETERRENT TO THE RESIDENTIAL FIRE PROBLEM THAN THE RESIDENTIAL SPRINKLER. QUICK-ACTING SPRINKLERS OFFER A MEANS TO DRAMATICALLY REDUCE FIRE LOSSES, BOTH OF LIFE AND PROPERTY. FOR YEARS, THE UNITED STATES FIRE ADMINISTRATION HAS BEEN THE MAJOR, IF NOT ONLY, FEDERAL AGENCY

PUTTING MONEY INTO QUICK-ACTING RESIDENTIAL SPRINKLER SYSTEM RESEARCH. AS A RESULT OF OUR AGGRESSIVE RESEARCH, DEMONSTRATION, AND INFORMATION PROGRAMS, WE HAVE WITNESSED A TREMENDOUS INCREASE IN INTEREST AND SUPPORT FOR SPRINKLER SYSTEMS. BASED IN PART ON THE SPRINKLER DEMONSTRATION PROGRAM, OVER 500 LOCAL COMMUNITIES HAVE INSTITUTED SOME FORM OF RESIDENTIAL SPRINKLER PROGRAM. A MAJOR OBJECTIVE ON SPRINKLERS IS ALSO INCLUDED IN THE DEPARTMENT OF HEALTH AND HUMAN SERVICES' HEALTH OBJECTIVES FOR THE YEAR 2000.

NO FOCUS ON FIRE SAFETY IS COMPLETE WITHOUT A TRIBUTE TO AMERICA'S FIRE SERVICE. THIS NATION HAS NO GREATER RESOURCE THAN THE MEN AND WOMEN OF THE FIRE SERVICE. FOR A NATION IN NEED OF ROLE MODELS, THEY ARE A SOURCE OF INSPIRATION. FOR A NATION IN NEED OF SELFLESS CARE, THEY PLACE THE VALUE OF THE LIVES OF OTHERS LIVES AHEAD OF THEIR OWN. FOR A NATION IN NEED OF VOLUNTEERS, THEY SPEND COUNTLESS HOURS OF THEIR OWN TIME TO BRING THE LESSONS OF PUBLIC FIRE SAFETY INTO EVERY SCHOOL. FOR ALL THESE REASONS, THESE UNSUNG HEROES DESERVE OUR GRATITUDE, ADMIRATION, AND SUPPORT.

MADAM CHAIR, THE FEDERAL EMERGENCY MANAGEMENT AGENCY THROUGH THE UNITED STATES FIRE ADMINISTRATION IS COMMITTED TO KEEPING THE PUBLIC INFORMED ABOUT FIRE SAFETY. WE NEED YOUR HELP AND SUPPORT IN CHANGING ATTITUDES AND IMPROVING THE QUALITY OF LIFE FOR CHILDREN AND FAMILIES AT RISK FROM FIRE. WE SUCCEED IN THIS MISSION WHEN A FAMILY SLEEPS WELL AT NIGHT KNOWING THEIR HOME IS PROTECTED FROM FIRE AND WHEN OUR SCHOOLS, PLACES OF WORSHIP, WORK

PLACES, AND RECREATION SITES ARE FIRE SAFE.

THANK YOU AGAIN FOR THE OPPORTUNITY TO APPEAR BEFORE YOUR COMMITTEE TODAY. I WILL BE GLAD TO ANSWER ANY QUESTIONS YOU OR OTHER MEMBERS OF THE COMMITTEE MAY HAVE.

Kids and Fires

Of Every...	*100 People*	*in the U.S.*		*16 are children*
Of Every...	*100 People*	*who die in fires in the U.S.*		*23 are children*
Of Every...	*100 Children*	*who die in fires in the U.S.*		*24 are killed because of children playing with fire*
Of Every...	*100 People*	*who die in child-set fires in the U.S.*		*85 are children*
Of Every...	*10 Fires*	*fire experts say that*		*8 are preventable*

United States Fire Administration
Federal Emergency Management Agency

Chairwoman SCHROEDER. Ms. Feely, we will put your statement in the record. The floor is yours. We welcome you.

STATEMENT OF HERTA B. FEELY, EXECUTIVE DIRECTOR, NATIONAL SAFE KIDS CAMPAIGN, WASHINGTON, DC

Ms. FEELY. Thank you very much.

As you just said, my name is Herta Feely. I am executive director of the National SAFE KIDS Campaign. I appreciate the opportunity to discuss this important issue.

There are a number of critical issues we feel we need to examine regarding children and fire.

One, children from low-income families and minority children are at greatest risk of fire injuries and deaths.

Two, there is a tremendous lack of education among low-income families about ways to reduce the risk of fire in their homes and what to do if a fire occurs.

Three, national, state and local policy makers need to develop comprehensive fire prevention policies to help reduce the high number of fire-related deaths and injuries to children.

For young children, the presence of a working smoke detector can mean the difference between life and death. Fires and burns are the second leading cause of unintentional death among children in this country and are the number one danger to children in the home. Each year, residential fires kill more than 1,200 children age 14 and under and seriously injure another 11,400 children. We know that 90 percent of the deaths occur in homes without working smoke detectors.

Residential fires are the leading cause of injury death for children in 11 states: Delaware, Illinois, Maine, Maryland, Michigan, New Jersey, Pennsylvania, South Carolina, Vermont, Virginia and West Virginia—none of your states. Whether they live in urban or rural areas, children at greatest risk of fire injuries and deaths are from minority, single-parent, or low-income families.

Black children and Native American children of all ages are more likely to die from residential fires than are white children. Black children age 14 and under represent 15 percent of the nation's children but account for 39 percent of childhood fire deaths. That is simply unacceptable.

Children from low-income families are perhaps at greatest risk of death or injury from house fires because they tend to live in high-risk environments.

The major causes of fire in low-income, inner-city neighborhoods are smoking, arson and children playing with matches or lighters. Studies show that fires started by children playing with matches and lighters is the leading cause of fire deaths for preschool-aged children.

We just heard that the Consumer Product Safety Commission is going to establish a mandatory standard for lighters which will incorporate a safety standard. This concurs with data showing that 37 percent of fire deaths among children four and under occur between the hours of 8 a.m. and 4 p.m., which is when they are at home playing.

Low-income and single-parent families often have difficulty finding affordable child care. This may result in young children left alone in the home or under the care of an older sibling while their parents are working. Young children have more than twice the national death rate for fire deaths.

The National SAFE KIDS Campaign is a national childhood injury prevention effort. The campaign is part of Children's National Medical Center and receives its primary funding from Johnson & Johnson.

Preventable injury is the number one killer of children under age 14 in this country. We target the major risk areas to children: Traffic injuries—passenger, pedestrian and bicyclist—fire and burns, drowning, poisoning and choking and falls.

The work of the campaign is accomplished through the voluntary grass-root efforts of over 130 state and local SAFE KIDS coalitions in 43 states and the District of Columbia, including many coalitions in areas represented by members of the committee. We are proud of the fact that seven of our local SAFE KIDS coalitions are led by fire departments.

Chairwoman Schroeder, I think those of us here today are well aware of the obstacles that families living in poverty must face each day in order to survive. Feeding, clothing and housing children is a daily challenge. Add to this the struggle of finding employment in today's economy, and it is clear why fire prevention is not a priority in the lives of many, especially low-income families. How can it be? Yet, without proper precautions, a family could lose everything they hold dear—including their children—within a matter of minutes.

Based on focus group discussions with parents, the National SAFE KIDS Campaign has learned that many families lack information about ways to reduce the risk of fire in their homes and what to do if a fire occurs. Parents mistakenly believe that, if a fire occurs, they will be able to find their children and lead them safely outside. Parents also believe that their children will instinctively know how to escape a burning building without having practiced a family escape plan.

Adults need to understand that children have many misconceptions about fire and react in different ways. For instance, children will hide under beds or in closets thinking they will be safe. Young children are often afraid of the fire fighter because of their equipment and fire fighting gear. Some kids fear being blamed for a fire, so they may not tell an adult until it is too late.

Fire education efforts which target adults can help eliminate some of these misconceptions, but without a working smoke detector a fire may go undetected until it is too late.

A little bit about Project Get Alarmed, a residential fire detection strategy which we launched in October, 1990, with the generous support of the United States Fire Administration and First Alert.

Because we know that 90 percent of the children who die in residential fires die in homes without working smoke detectors, the goals of Project Get Alarmed are to increase the number of working smoke detectors in use in low-income homes with young children; raise awareness about the need to install, test and maintain

smoke detectors—that is very critical; inform parents about the importance of home escape plans; and mobilize people to strengthen smoke detector ordinances across the country.

There are still nine states which do not have smoke detector ordinances, and Colorado is one of those.

Many SAFE KIDS coalitions launched their program in October, 1990, by giving away smoke detectors and conducting educational programs for low-income families. Through the support of First Alert, we have distributed over 25,000 free smoke detectors to the coalitions over the past two years. Coalitions, in turn, have distributed and installed smoke detectors through fire departments, public assistance programs, parent-teacher groups, housing authorities, emergency medical service staff, Kiwanis and Rotary Clubs.

During the second year of Project Get Alarmed, coalitions have been distributing batteries to those families who received smoke detectors last year, and additional smoke detectors are being distributed to low-income families.

Our public policy initiatives include working to strengthen state smoke detector laws; to enact laws in the nine states without them; and working with such organizations and agencies such as the fire chiefs, the National Association of State Fire Marshals, the U.S. Consumer Product Safety Commission and the U.S. Fire Administration to ensure that every state has a comprehensive fire prevention policy.

Unfortunately, there are still nine states in the country that lack smoke detector ordinances: Colorado, Idaho, Kansas, Mississippi, Missouri, Oklahoma, Pennsylvania, South Carolina and South Dakota.

We have also been working to support passage of the Federal Fire Safety Act, H.R. 3360, which as you mentioned earlier was passed by the House yesterday, and we are working with the Consumer Product Safety Commission on their smoke detection project.

I would like to conclude my testimony with one example of how the campaign's efforts to fight the problem of residential fires have paid off.

In October, 1991, the presence of a working smoke detector saved the lives of a South Carolina mother and her two young children. The mother had received a free smoke detector from the Kershaw County SAFE KIDS coalition during its second year of Project Get Alarmed.

Three months later, the mother had taken a kerosene heater from its usual position in the hallway into the bathroom to warm up the room for her bath. After closing the bathroom door, she returned to the kitchen to make breakfast for her sons. The smoke detector went off, but not seeing any smoke or fire the mother took the detector off the wall and waved it back and forth to make the alarm stop. She then put it back on the wall and returned to the kitchen.

A few minutes later the detector went off again. Still not seeing any flames, the mother went to the bathroom to investigate. When she opened the door, flames knocked her down. She tried to pull the door closed, but was unsuccessful. The mother ran to the kitch-

en to get the two boys and then hurried to a neighbor's trailer to call 911.

Before the fire department could arrive, the roof of the family's trailer caved in, but thanks to a working smoke detector no one was injured.

Thank you again for the opportunity to come before this committee to speak on behalf of the thousands of children and families whose health and safety are at risk every day because of the threat of residential fires.

Chairwoman SCHROEDER. Thank you.

[Prepared statement of Herta B. Feely follows:]

PREPARED STATEMENT OF HERTA B. FEELY, EXECUTIVE DIRECTOR, NATIONAL SAFE KIDS CAMPAIGN, WASHINGTON, DC

INTRODUCTION

Good morning, Chairwoman Schroeder. I am Herta B. Feely, Executive Director of the National SAFE KIDS Campaign. Thank you for this opportunity to discuss an issue of great importance to everyone in this country -- how to reduce the risk of fire deaths and injuries to children. I commend your efforts to bring this important issue to the attention of the American people through your role as Chairwoman of the House Select Committee on Children, Youth, and Families. We hope that the information provided in today's hearing will help to reduce the risk of fire deaths and injuries, especially among low-income families with young children.

There are a number of critical issues we need to examine regarding children and fire:

- Children from low-income families and minority children are at greatest risk of fire injuries and deaths.

- There is a tremendous lack of education among low-income families about ways to reduce the risk of fire in their homes and what to do if a fire occurs.

- National, state and local policy makers need to develop comprehensive fire prevention policies to help reduce the high number of fire-related deaths and injuries to children.

For young children, the presence of a working smoke detector can mean the difference between life and death. Fires and burns are the second leading cause of unintentional death among children in this country and are the number one danger to children in the home. Each year, residential fires kill more than 1,200 children age 14 and under, and seriously injure another 11,400 children. We know that 90 percent of these deaths occur in homes without working smoke detectors.

60-327 O - 93 - 2

Residential fires are the leading cause of injury death for children in eleven states: Delaware, Illinois, Maine, Maryland, Michigan, New Jersey, Pennsylvania, South Carolina, Vermont, Virginia and West Virginia.

THE NATIONAL SAFE KIDS CAMPAIGN

The National SAFE KIDS Campaign is a program of Children's National Medical Center in Washington, D.C., and is supported by the Johnson & Johnson Family of Companies. We are the first and only nationwide childhood injury prevention program. Preventable injury is the number one killer of children under age 14 in this country. Each year in the United States 8,000 children are killed and 50,000 more are permanently disabled by preventable injuries. The Campaign Chairman is former Surgeon General Dr. C. Everett Koop, and our Honorary Chairman is Mrs. George Bush.

The National SAFE KIDS Campaign takes a multi-faceted approach to injury prevention that includes program development, media, public policy initiatives and coalition-building. Each of these components is used to target the major risk areas to children: traffic injuries (passenger, pedestrian and bicyclist), fire and burns, drowning, poisoning and choking, and falls. The goals of the long-term campaign are to raise awareness among parents and adults that injuries are the leading health threat facing children today; to change society's notion that "accidents" just happen; to work for change in products and the environment that will passively reduce the causes of injury; and to do what we're doing today -- to make childhood injury prevention a public policy priority for federal, state and local decision-makers.

The work of the Campaign is accomplished through the voluntary grassroot efforts of over 130 State and Local SAFE KIDS Coalitions in 43 states and the District of Columbia. We are proud of the fact that seven of our Local SAFE KIDS Coalitions (Tucson, AZ, Jacksonville, FL, Gwinnett Co., GA, Geneva, IL, Clovis, NM, Prince William Co., VA, and Appleton, WI) are lead by fire

departments. The Campaign also includes 75 national organizations which comprise our National Coalition to Prevent Childhood

Injury. Members of the coalition include the American Academy of Pediatrics, American Burn Association, American Medical Association, Consumer Product Safety Commission, National PTA and the United States Fire Administration.

MEDICAL AND PSYCHOLOGICAL EFFECTS OF BURNS

Medical and psychological research shows that a burn is the most devastating injury a human being can sustain. Burns destroy skin cells and occur when skin layers absorb too much heat. Depending upon the intensity of the burn and the time of exposure, the underlying layers of muscle, fascia and bone can also be destroyed. Because children's skin is thinner, they are very susceptible to burns. They will sustain more severe burns at lower temperatures and in less time than adults.

Burn patients often face extended and painful hospitalization, disfigurement and possible disability. Their families face financial hardship and emotional anguish. According to information obtained from Children's National medical Center, Washington, D.C., the average daily cost for treating a ten-year-old child with a 50 percent second or third degree burn in the early stages of treatment is $3,252.98. This base figure does not include surgical expenses or any special consultations from physical or occupational therapists, or other specialists.

Treatment continues long after painful acute care has healed the wound. Since scar tissue contracts over time, thickening, distorting features, and impeding movement, reconstructive surgery -- which can involve multiple hospitalizations -- is often necessary. It is not surprising that emotional scars are a common by-product of burn trauma. To a child who has been burned, the emotional scars may be more overwhelming than the physical ones.

THE PROBLEM

Whether they live in urban or rural areas, children at greatest risk of fire injuries and deaths are from single-parent, low-income or minority families. Black children of all ages are over three times more likely to die from residential fires than are white children. **Black children age 14 and under represent 15 percent of the nation's children, but account for *39 percent* of childhood fire deaths.**

Children from low-income families are perhaps at the greatest risk of death or injury from house fires because they tend to live in high risk environments.

The major causes of fire in low-income, inner-city neighborhoods are smoking, arson and children playing with matches or lighters. Low-income families often have difficulty finding affordable child care. This may result in young children left alone in the home or under the care of an older sibling while their parents are working. Young children have more than twice the national death rate for fire deaths. Studies show that fires started by children playing with matches and lighters is the leading cause of fire deaths for preschool-aged children. **This concurs with data showing that 37 percent of fire deaths among children 4 and under occur between the hours of 8 a.m. and 4 p.m.**

The recent death of a two-year-old in Brooklyn underscores the urgent need for fire prevention educators to reach families with young children. While her mom was in the basement doing laundry, the little girl and her sisters were in the bedroom playing with a cigarette lighter. The bed where the little girl was sitting caught fire. The other children left the two-year-old on the burning bed and ran for help, but the fire spread quickly and the entire bedroom was ablaze by the time they returned. Unfortunately, there was no working smoke detector in the apartment to sound the alarm for help and another child needlessly died.

Over-crowded and dilapidated housing also contribute to the risk of fire in urban dwellings. Studies show that cities with higher levels of poverty also have higher rates of residential fires and fire deaths. This relationship holds true for rural areas as well, although the sources of residential fires in rural settings are different.

One of the greatest fire hazards to low-income children is the lack of adequate and safe heating sources in the home. Fires caused by heating equipment is another leading cause of fire deaths among young children. Preschool children are more than twice as likely to die in a fire caused by heating equipment than the general population. Fire dangers posed by heating equipment are especially prevalent in rural communities. An example is the plight of low-income families living in the rural South. Some families mistakenly believe that a portable heater or wood stove will provide enough heat to endure the Southern cold spells. Yet, faulty heating equipment or the improper use of heating sources often result in fires.

When fire does break out in a rural dwelling, the distance between rural homes and the local fire department often adds to the difficulty of controlling the fire and may hinder rescue attempts. It is also likely that many of the poorest rural families do not have access to a phone with which to call for help. For these families, having at least one working smoke detector is imperative.

In October 1991, the presence of a working smoke detector saved the lives of a South Carolina mother and her two young children. The mother had received a free smoke detector from the Kershaw County SAFE KIDS Coalition during its second year of Project GET ALARMED, the Campaign's fire prevention program. Three months later the fire occurred, destroying the family's mobile home. The fire was started by a kerosene heater in the mobile home's bathroom at about 7:30 a.m. on a Tuesday morning. The father had already left for work and mom had taken the heater from its usual position in the hallway into the bathroom to warm up the room for her bath. After closing the bathroom door, she returned to the kitchen to make breakfast for her sons.

BEST COPY AVAILABLE

The smoke detector went off, but not seeing any smoke or fire the mother took the detector off the wall and waved it back and forth to make the alarm stop. She then put it back on the wall and returned to the kitchen. A few minutes later the detector started going off again. Still not seeing any flames, the mother went to the bathroom to investigate. When she opened the door, flames knocked her down. She tried to pull the door closed, but was unsuccessful.

The mother ran to the kitchen to get the two boys and then hurried to a neighbor's trailer to call 911. Before the fire department could arrive, the roof of the family's trailer caved in. Fires like this happen all too frequently in rural communities and without the presence of a working smoke detector, the outcome is often fatal.

Chairwoman Schroeder, I think those of us here today are well aware of the obstacles that families living in poverty must face each day in order to survive. Feeding, clothing and housing children is a daily challenge. Add to this the struggle of finding employment in today's economy and it is clear why fire prevention is not a priority in the lives of these families. Yet, without proper precautions, a family could lose everything they hold dear - including their children - within a matter of minutes.

Once a fire has started, it can spread out of control in just 30 seconds. In less than two minutes, you can pass out or even die from poisonous smoke and gases. Imagine trying to escape a fire in an unsturdy house or apartment building where doorways are blocked, windows barred, and fire escapes non-existent. Now imagine yourself as a young child, perhaps a preschooler. With no advance warning, what are your chances of getting out alive?

Based on focus group discussions with parents, the National SAFE KIDS Campaign has learned that many families lack information about ways to reduce the risk of fire in their homes and what to do if a fire occurs. Parents mistakenly believe that if a fire occurs, they will be able to find their children and lead them safely outside.

Parents also believe that their children will know how to escape a burning building without developing a family escape plan.

Parents need to understand that children have many misconceptions about fire and react in different ways. For instance, children will hide under beds or in closets thinking they will be safe. Young children are often afraid of the firefighter because of their equipment and firefighting gear. Some kids fear being blamed for a fire, so they may not tell an adult; older children may think they can control the fire.

Both parents and children underestimate the dangers of the smoke and poisonous gases associated with fire. **Only 26 percent of all fire victims die as the result of burns; 74 percent die from smoke inhalation and the lack of oxygen.** Unlike most fires portrayed on television, smoke is not puffy and white. The thick, black, choking smoke that travels quickly throughout the house can disorient a person and inhibit their escape.

Fire education efforts which target children can help eliminate some of these misconceptions, but without a working smoke detector, a fire may go undetected until it is too late.

PROJECT GET ALARMED: A RESIDENTIAL FIRE DETECTION STRATEGY

Since October 1990, the National SAFE KIDS Campaign has been working to reduce the number of childhood deaths and injuries from residential fires through an initiative called, "Project GET ALARMED: A Residential Fire Detection Strategy". The goals of Project GET ALARMED are to increase the number of working smoke detectors in use in low-income homes with young children; raise awareness about the need to install, test and maintain smoke detectors; inform parents about the importance of home escape plans; and mobilize people to strengthen smoke detector ordinances across the country.

The Campaign has been fortunate to have several Project GET ALARMED sponsors who have been extremely generous with their funding, time and expertise: First Alert, the United States Fire Administration and Amerind Risk Management Corporation. Their support enabled the Campaign to successfully develop a public-private partnership to help reduce unintentional injuries to children.

During the first year of Project GET ALARMED, the Campaign concentrated on creating and implementing smoke detector giveaway and/or installation programs; establishing partnerships with fire departments, businesses, service clubs and other organizations; conducting educational programs; and raising awareness through the media. The Campaign developed a 75-page document, distributed to our 130 State and Local SAFE KIDS Coalitions, that provides a step-by-step guide to conducting Project GET ALARMED. In addition, our national office provided the coalitions with a three-day training session on the program, a comprehensive package of support materials including educational videos and brochures, and guidelines for educational presentations. Through the generous support of First Alert, we were also able to provide 114 free smoke detectors to each of the coalitions.

Coalitions were able to adapt Project GET ALARMED to meet the needs of their own communities. Most coalitions launched their programs in October 1990 during National Fire Prevention Week by giving away smoke detectors to and conducting educational programs for low-income parents. Smoke detectors have been distributed and installed through fire departments, public assistance programs, parent-teacher groups, housing authorities, emergency medical service staff, Kiwanis and Rotary clubs. Distribution sites have ranged from local fire departments to health clinics to schools. As of January 1992 our coalitions have distributed and installed over 20,000 smoke detectors around the country in low-income homes with young children.

Education about smoke detectors has ranged from distributing Project GET ALARMED brochures at safety fairs to conducting detailed seminars at local health clinics.

Many of our coalitions are in the second year of implementing Project GET ALARMED, while new Coalitions are just beginning the first year's activities. Year Two activities got underway in October 1991, focusing on a battery replacement campaign and the distribution of additional smoke detectors. First Alert has donated an additional 100 smoke detectors and 100 batteries to each coalition for Project GET ALARMED: Year Two activities. Throughout the year, Coalitions are also working with their local utility companies to include smoke detector maintenance reminders in their customers' bills.

There are several important messages parents and caregivers must receive in order to prepare children in case of fire. The National SAFE KIDS Campaign recommends that educational programs include the following:

- **Teach children what a smoke detector alarm sounds like.**

- **Teach families to plan two escape routes out of their home. Children must be able to follow a planned escape route in case an adult is not around.** It is important to have two escape routes in case one is blocked by fire. There will not be enough time to figure out another plan in the midst of a fire.

- **Practice the escape routes during fire drills at home. Since most residential fires occur between midnight and 6 a.m., fire drills should be practiced at night.** Use the fire drills as an opportunity to test the smoke detector. Try to make the drills spontaneous so that family members react instinctively to the alarm. Alternate the exit used so both routes become familiar.

- **Teach children to crawl under the smoke during a fire and to touch doors before attempting to open them. If the door is hot, children should know how to use an alternative escape route.** Temperatures in a burning room can reach as high as 600 degrees F. Heat rises, therefore temperatures are lower closest to the floor. Smoke and toxic

gases also rise, so staying low can make breathing easier. Children should also know to cover their mouths and noses with a towel or cloth before exiting the room.

- **Designate an outside meeting place, perhaps near a tree, a street light or a neighbor's house.** Make sure that all family members know the meeting place and go there immediately after leaving the house. A family member should never stop to call the fire department before leaving their home.

- **Under no circumstances should a child, or an adult, re-enter a burning building, no matter what prized possession was left behind.** If a family member is missing, alert the firefighters.

- **Finally, parents should be encouraged to visit the local fire station with their children. Children must be able to see a firefighter in full firefighting gear and learn that he or she is not a monster but, rather, someone whose job is to put out fires and save children.**

Taking the time to teach children and their families about fire safety could save their lives.

PUBLIC POLICY INITIATIVES

In general, since the passage of state smoke detector ordinances, a rise in smoke detector usage has occurred. We also know that this increase in smoke detector usage has been accompanied by a significant reduction in fire-related deaths and injuries. However, there are still nine states in this country that lack smoke detector ordinances for one and two family dwellings: Colorado, Idaho, Kansas, Mississippi, Missouri, Oklahoma, Pennsylvania, South Carolina and South Dakota. There are also many more states with weak or unenforceable smoke detector laws.

In addition to educating children and their families about fire prevention, the National SAFE KIDS Campaign is working with the firefighters' unions, the International Association of Fire Chiefs, the National Association of State Fire Marshals, the U.S. Consumer Product Safety Commission and the U.S. Fire Administration to ensure that every state has a comprehensive fire prevention policy. In addition to enacting and strengthening state smoke detector laws, we are also encouraging state and local governments to support fire prevention education efforts in their communities, especially those programs targeted at high-risk populations.

The Campaign's public policy efforts to reduce fire injuries and deaths have been twofold on the federal level. First, the Campaign has been working with the U.S. Consumer Product Safety Commission's smoke detector project to increase the use and maintenance of residential smoke detectors. The project, which began in 1991, has assembled a national network of representatives from federal agencies, the Congressional Fire Caucus, fire service organizations, states, standards and codes organizations, the insurance industry, corporations, trade associations and the media.

Second, the Campaign has been working to support passage of the "Federal Fire Safety Act" (H.R. 3360), which was introduced in September 1991 by Representatives Rick Boucher (D-9th VA) and Sherwood Boehlert (R-25th NY) to require smoke detectors in all federally assisted housing. We feel that the "Federal Fire Safety Act of 1991" will help to reduce the risk of fire deaths and injuries, especially among low-income children.

H.R. 3360 will require stronger fire safety measures in specified categories of federal office buildings, housing for federal employees, and federally subsidized housing. Specifically, all newly constructed multi-family high rise housing (four or more stories) subsidized by the Federal Government would have to be protected by automatic sprinklers and hard-wire smoke detectors. All other newly constructed federally subsidized housing would have to be protected by smoke detectors. All existing housing units covered by rental assistance must be protected by hard-wire smoke detectors within 18 months after enactment of H.R. 3360.

We urge members of this committee to show their support for national fire prevention efforts by voting for passage of H.R. 3360 when it reaches the House floor.

CONCLUSION

Chairwoman Schroeder, thank you again for the opportunity to come before this committee to speak on behalf of the thousands of children and families whose health and safety is at risk every day because of the threat of residential fires. I would be happy to answer any questions the Committee may have.

Chairwoman SCHROEDER. Chief Sanders.

STATEMENT OF COLONEL RUSSELL E. SANDERS, CHIEF, LOUISVILLE DIVISION OF FIRE, LOUISVILLE, KY

Chief SANDERS. Thank you for allowing me to speak this morning on this very important topic. I would also like to thank Congressman Mazzoli for such a gracious introduction.

Mr. MAZZOLI. It was all true. I appreciate it very much.

Chief SANDERS. I have previously submitted written testimony outlining many of the successful programs we have implemented in Louisville. I would like to briefly highlight the results of some of our public education efforts because they have proved to be very effective.

Since changing our mission and philosophy of delivering services, we have reduced fire deaths by 30 percent. Civilian injuries have been reduced 50 percent. Fire fighter lost-time injuries are down 45 percent. Property loss has been reduced $1.5 million, and that is not even considering inflation. And fire calls are down 28 percent.

This progress is the result of a change of mission, a change of direction, a change of mentality from a fire suppression mentality—of waiting, reacting and responding to death and destruction—to a mentality of prevention through education.

I have spent 25 years in the fire department, have responded to well over 1,000 fires and have seen at least 100 needless, preventable fire deaths. The story is always the same. It is the very young, the very old, the helpless and the very poor. Those groups most often make the ultimate sacrifice.

I believe American fire fighters are, without question, the best fire fighters in the world. But no matter how good we are we cannot reverse the death and destruction that occurs before we even arrive. No matter how good we are, we cannot give a grieving mother back her children when in most cases they are lost before we even responded.

As a fire fighter I have, unfortunately, been on one end of a body bag far too many times. I will never forget the taste and smell of death. I will never forget the anxiety and frustration experienced in responding to fire deaths.

Today we have a program called Critical Incident Stress Debriefing, a program to help fire fighters deal with the mental trauma. When I was coming through the ranks we had to learn to deal with it our own way. My way was to continue to shovel debris from the home where we had earlier removed the bodies, and complete my 24-hour tour of duty. Then, I would go home very early the next morning and I would slip into my house quietly and walk down to the bedroom where my two young sons slept. I would crawl in bed with those boys and I would listen to them breathe. That is a beautiful sound. I would then thank God for my kids, and pray for the ones we lost the night before.

That is a tough way to get an education, but I did learn that our mission must always be prevention. We must educate our legislators, our public and private sector leaders and the citizens in our communities to the importance of fire safety.

We have identified the fire problem in this country and we know the solution. The problem is complacency. The solution is education. Educating families to the importance of working smoke detectors, of sprinklers, of home exit drills and the like.

There are excellent programs available to help accomplish these goals. The National Fire Protection Association's "Learn Not to Burn" program is an example of a comprehensive long-term program, designed to address the fire problem. This program should be part of every school curriculum in the United States. The International Association of Fire Chiefs' "Change Your Clock, Change Your Battery" program, is an excellent program designed to target a specific problem, dead batteries in smoke detectors.

These programs and many more are available. Our challenge is to get this information out to the citizens of our community.

We have found in the City of Louisville, in the Louisville Fire Department, that we cannot do this alone. Therefore, we have formed local coalitions with groups such as SAFE KIDS, represented on my right, and the Student Leadership Institute at Highland Middle School, represented by Ms. Grant on my left.

In closing, please do not misunderstand what I am saying today. I am not suggesting that we reduce staffing on fire companies. In the United States in many cities today staffing is already dangerously low. I am not suggesting that we change the traditional structure of the American fire department. I am simply saying we must redirect our energy and efforts, that we must be first and foremost public educators, and the most important lesson we can teach is that fire safety is not a right. Fire safety is everyone's responsibility.

Thank you.

Chairwoman SCHROEDER. Thank you very much. That was very, very moving.

[Prepared statement of Colonel Russell E. Sanders follows:]

Prepared Statement of Colonel Russell E. Sanders, Chief, Louisville Division of Fire, Louisville, KY

Good morning. Madame Chairman and members of the Committee, it is a privilege to be invited to testify before you today on behalf of the Louisville Division of Fire.

I joined the Louisville Division of Fire in 1967 and spent all but two years of my career in the busiest fire district in the City. During these years I fought well over a thousand fires and have anguished over at least 100 needless fire deaths. I emphasize needless, because every fire death I have witnessed was preventable.

In 1981 I began researching the fire problem in the United States. I found that our firefighters were being injured and killed at an alarming rate, and many times their sacrifices were in vain. And, it was very difficult for me to accept the fact that in this country we were losing more people and property to fire than any other industrialized nation in the world. Faced with these embarrassing statistics, and after much study, travel, and reflection on my own experiences, I was convinced it was time for a radical change in our method of delivering fire protection services.

I have always believed that our firefighters are the best in the world at fighting fires. They are dedicated, courageous, well trained and, unfortunately, they get plenty of experience. But no matter how good or how brave our firefighters are, they cannot reverse the death and destruction that occurs before they even arrive at the scene. They cannot replace those special photographs that have been reduced to ashes on the floor and they cannot give a grieving mother back her children that were lost, in most cases, before the fire department even received the call. Our traditional mission of waiting, reacting and responding to fires was simply not proving effective. If we were ever going to make a real difference, we would have to change our method of delivering services. We would have to change societal attitudes about fire safety.

On June 6, 1986, I got my chance to initiate change; on that day I was promoted to Chief of the Division of Fire. I changed the mission of the Louisville Division of Fire from a fire suppression to a public education/fire prevention emphasis. Along with this change of mission, I established the following philosophy of delivering services to the community: Anytime we must go beyond public education, we are in a system of failures. If we must enforce the fire code, we do so because the property owner or occupant was not properly educated on the importance of fire safety. And, when we respond to alarms, our lights and sirens signal the ultimate failure - the unnecessary loss of life and property.

In the past, public education and fire prevention was the primary responsibility of those assigned to the Fire Prevention Bureau. Today, it is the primary responsibility of every member of the Louisville Division of Fire.

In order to carry out this new mission, an aggressive in-house training program was implemented. In addition to our traditional fire suppression and rescue training during recruit school, we began including 40 hours of public education and fire prevention training. Also, all 106 Company Commanders in the Division received daily training in the City's fire prevention code, followed by semiannual testing at the University of Louisville. This training provided our suppression officers with the knowledge and credentials necessary to conduct complex building inspections. Finally, upon promotion, new officers received fire prevention refresher training to reinforce our public education/fire prevention mission.

With our people properly trained and our "house in order," we took our message and programs to the community. The following are brief summaries of a few of the successful programs and strategies we are currently using in the City of Louisville:

1. Neighborhood Blitzes - Volunteers from local schools, businesses, and civic organizations join with firefighters, going door-to-door in neighborhoods where we have a history of high fire incidents, offering free smoke detectors and fire safety literature.

2. Home Inspection Program - Firefighters, on every fire company in the City, spend 10 hours per month going door-to-door in their inspection districts providing free home safety inspections. Fire hazards are noted during these inspections, smoke detectors and/or batteries provided and installed for those in need, and assistance in preparing a home exit drill is offered. Over 40,000 smoke detectors have been given away since 1986, most through this door-to-door approach.

3. Fire Facts School Program - Each October (Fire Prevention Month) "fire facts" cards are distributed to every public and private school in the county. These cards provide fire safety tips and include a quiz to test each child's fire I.Q. The children take the fire facts cards home to review with their families and return the completed quizzes to their teachers. The completed cards are then returned to the fire department and a drawing is held to select two winners. The two children selected are named "Fire Chiefs For A Day" and receive several prizes (donated by local businesses) and special honors. Each year we reach approximately 42,000 children with our fire safety message, through this single program.

4. The Great Louisville Fire Drill - The Great Louisville Fire Drill is held each October during Fire Prevention Week. Fire division members volunteer to staff the fire drill events, which include a children's smoke house, a five alarm chili cook-off (prepared by the firefighters), a fire safety trail (where children learn seven specific behaviors), popular animated characters, live entertainment, competitive events, free balloons, chili, hot dogs, and much more. With attendance now exceeding 15,000, this event has proven to be an excellent vehicle for reaching the public with our fire safety message.

5. The Live House Burn - Once each year, with live television coverage during the evening news, we burn a vacant dwelling to demonstrate how quickly a fire will destroy a home. With the dwelling fully involved in fire, all fire apparatus are pulled out of the stations and their sirens are simultaneously sounded. This signals everyone in the community to test their smoke detectors and practice their home exit drills.

6. Mayor's Firehouse Chats - Four times each year, Mayor Abramson invites citizens to an open house at a selected fire station. While the neighbors are enjoying free chili prepared by the firefighters, the Mayor and I discuss the importance of fire safety. The Division received the International Association of Fire Chief's Award For Excellence for this program.

Our change of mission, carried out through these and related programs, has resulted in the following reductions in fire deaths, firefighter and civilian injuries and property loss in the City:

* Civilian fire deaths have been reduced by approximately 30% (from an average of 15 to 10 per year). To date, during calendar year 1992, only two fire deaths have

BEST COPY AVAILABLE

occurred in the City of Louisville. I'm confident that this year we will break the City's all time record low of six fire deaths for any one calendar year.

* Civilian fire injuries have been reduced by 50% (from an average of 139 per year to an average of 73 per year).

* Firefighter (time lost) injuries have been reduced by 45%. This reduction is reflected in annual overtime spending, which has been reduced by $182,000 (from $404,100 to $222,000).

* Fire calls are down by 28%.

* Annual property loss has been reduced by $1.5 million (from an annual average loss of $10 million to $8.5 million). Also, it is important to note here that if an inflation factor were included, this reduction in dollar loss would be much greater.

In closing, I would like to note the significance of a team effort in addressing the City's fire problem. The most crucial sources of support have, of course, been from the citizens of Louisville, and the firefighters who have taken the leading role in fire safety education. Also, a vital contribution has been made by Louisville's Mayor Abramson. His determination and personal involvement have been invaluable. Additionally, these programs would not have been successful without the human and financial resources provided by members of the Board of Aldermen and private sector leaders throughout the community.

Madame Chairman and members of the Committee, I thank you for your interest in this critically important issue.

Chairwoman SCHROEDER. Ms. Grant, we welcome you and we cheer you for all you have been doing in your Student Leadership Institute. We are interested in hearing what you have to say today.

STATEMENT OF ALLISON B. GRANT, MEMBER, STUDENT LEADERSHIP INSTITUTE, HIGHLAND MIDDLE SCHOOL, LOUISVILLE, KY

Ms. GRANT. Thank you.

Good day, Madam Chair, Mr. Mazzoli, and members of the select committee. My name is Allison Grant, and I will be entering the eighth grade at Highland Middle School in Louisville, Kentucky.

I am pleased to represent my school, community, and the Jefferson County Public School District before you today. I am here to tell you about the involvement of the Highland Middle School Student Leadership Institute with the Louisville Fire Department and our efforts to promote fire safety and prevention.

First, allow me to tell you about our school and the Student Leadership Institute. Because we are an international studies learning choice school we are concerned about the world as a whole. However, our world begins right here in our community. This is why the Student Leadership Institute was begun.

The Student Leadership Institute was formed in November of 1990 as a business education partnership. It is financially sponsored by Coopers & Lybrand accounting firm. Our motto, "to lead is to serve, to serve is to lead, we can make a difference" describes what we are all about. Over 300 students have contributed more than 3,000 volunteer community service hours for various projects since January of 1991. These experiences have taught us self-confidence and respect. We also learned that involving young people can indeed benefit the community.

On January 6, 1991, a tragic fire claimed the lives of three small Louisvillian children. Our community was stunned by these unnecessary deaths. There was a smoke detector in the house, but it did not have a battery.

Our assistant principal, Mr. Kevin Stevenson, and our Coopers & Lybrand liaison, Joyce Smith, contacted Lt. Colonel Don Cummins with an offer of help. The fire department enthusiastically accepted our assistance.

On January 18, 49 other students and I teamed up in 25 pairs with a fire fighter or an adult volunteer from Coopers & Lybrand and Kosair Children's Hospital's SAFE KIDS program. We canvassed over 800 homes in the neighborhood where the fire took place. We checked homes for inoperable smoke detectors, replaced old batteries and installed over 470 smoke detectors that we had helped purchase.

Three months later, in April, a home in which we had installed a smoke detector caught fire during the night. Everyone managed to get out safely. A woman who lived there wrote a letter to the fire department. She thanked them and said the smoke detector saved the lives of her family and expressed her gratitude to the students of the Highland Middle School.

This canvass was so successful that the fire department called on us again, in March of 1991, to canvass another neighborhood. Again, we teamed up with fire fighters and Coopers & Lybrand per-

sonnel and passed out fire safety and prevention pamphlets to over 1,100 homes. Coincidentally, a group of our students discovered a kitchen fire in progress while canvassing and quickly alerted the fire department. A burner had been left unattended on a stove, but the quick action of the students and fire fighters saved the home.

As a result of our volunteer work with the Louisville Fire Department, the Highland Middle School Student Leadership Institute was presented the prestigious Golden Trumpet Award by the Louisville Fire Prevention Council in October, 1991, for "countless hours of volunteer service." We have eaten hot dogs and firehouse chili in the fire station, and in turn we hosted a Firefighters' Appreciation Day at Highland.

We are continuing to volunteer with the Louisville Fire Department. On October 11th, we will be working with the Louisville Fire Department during the Great Louisville Fire Drill, which will be held in Louisville's Seneca Park. We will be teaching children ages kindergarten through sixth grade good fire safety behaviors. We will also be visiting preschoolers in every day care center in the city with the fire fighters to teach the eight learning objectives for fire safety.

For senior citizens, we will be involved in a program called Let's Retire Fire, which will explain to senior citizens the causes of fires and how to prevent them.

We have developed a mutual respect and friendship with Chief Sanders, Lt. Col. Cummins and all of the fire fighters. We know the fire fighters have confidence in our generation and our ability to be seen as community resources rather than liabilities.

It is impossible to tell you how much we have learned and benefited from these friendships. It is also difficult to determine how many lives have been saved due to the combined efforts of Coopers & Lybrand and the Louisville Fire Department and the students at Highland Middle School.

Business, the government and education do join hands in Jefferson County, Kentucky, to make a difference.

Thank you.

Chairwoman SCHROEDER. Allison, that was very, very impressive. Are you sure you are only going into the eighth grade? That was amazing.

[Prepared statement of Allison B. Grant follows:]

PREPARED STATEMENT OF ALLISON B. GRANT, MEMBER, STUDENT LEADERSHIP INSTITUTE, HIGHLAND MIDDLE SCHOOL, LOUISVILLE, KY

Good morning Chairwoman Schroeder and members of the Select Committee. My name is Allison Grant and I am an eighth grade student at Highland Middle School in Louisville, Kentucky. I am pleased to represent my school, community and the Jefferson County, Kentucky, Public School District before you this morning.

I am here to tell you about the involvement of the Highland Middle School Student Leadership Institute with the Louisville Fire Department in our efforts to promote fire safety and prevention. First, allow me to tell you about our school and the Student Leadership Institute. Because we are an International Studies Learning Choice School, we are concerned about the world as a whole. However, our world begins right here in our community. This is why the Student Leadership Institute was begun.

Our Student Leadership Institute was founded in November, 1990, as a business/education partnership. Our institute was given a $2500 grant by the local office of the international firm, Coopers & Lybrand, CPAs. Since then, Coopers has given us over $4200, which has been used to fund our volunteer community projects. Essen-

tially, we are a youth service organization. One of our main purposes is to develop future community leaders through volunteer community service today. Our motto, "To lead is to serve. To serve is to lead. We can make a difference," describes what we are all about. Over 300 of our students have contributed more than 3000 hours of volunteer community service since January of 1991. Volunteer projects have included:

(1) The purchase, preparation and serving of lunch on three separate Saturdays at the Jefferson Street Chapel in Louisville to over 450 homeless and indigent men, women and children;

(2) The collection of thousands of pieces of candy, gum and toiletries, which were given to the USO for distribution to our troops in Desert Storm;

(3) The planting of trees and flowers on two separate occasions in our school neighborhood with the cooperation of the city of Louisville's Operations Brightside;

(4) The harvesting of over 13,000 pounds of broccoli, corn, green beans, cauliflower and apples by eighty of our students in cooperation with Kentucky Harvest. The produce was donated to missions and agencies to feed the homeless;

(5) The spring cleaning of senior citizens apartments near our school. We also invited 40 of these senior citizens to Thanksgiving lunch this past year, where we served as hosts, hostesses and food servers;

(6) A blood donorama at our school, which was co-sponsored by the Louisville Fire Department;

(7) Weekly visitations to a neighborhood nursing home, where we assisted staff with the in house transportation and care of residents;

(8) Fund raising efforts for the Metro United Way campaign;

(9) A continuing schoolwide paper recycling program;

(10) And, the weekly policing of our campus to remove paper and trash.

Many of these activities and field trips took place during school hours. Our sponsor, assistant principal Mr. Stevenson, and our principal, Dr. Knight, firmly believe there are educational experiences to be found in the community that are as worthwhile, in many instances, as those found in the classroom. In addition to helping so many people, these experiences made us feel good about ourselves and taught us we can make significant contributions to our community.

Due to the overwhelming success of our Student Leadership Institute, the program is being expanded this school year to include our neighbor, Atherton High School, in a Youth Service Partnership (sponsored by Coopers & Lybrand in cooperation with the American Junior Red Cross). The Red Cross is committed to providing leadership training, volunteer cadet training and summer volunteer placement for students in the Youth Service Partnership. This summer I attended a 40 hour Junior Red Cross volunteer cadet training program and a week long leadership camp at Camp Crescendo in Lebanon, Kentucky. I was placed by the Junior Red Cross in volunteer work at a nursing home, planned and presented activities at a preschool and volunteered at a senior sports day at a senior citizens home.

Now, allow me to tell you how our Student Leadership Institute became involved with the Louisville Fire Department. On January 6th, 1991, a tragic fire in Louisville's west end, took the lives of three small children. Our community was stunned by these unnecessary deaths. There was a smoke detector in the house, but it did not have a battery. Our liaison with Coopers and Lybrand, Joyce Smith, like many in our community, was deeply disturbed. She called our sponsor, Mr. Stevenson, and he in turn contacted the Louisville Fire Marshall, Lt. Col. Don Cummins with an offer of help. The fire department was more than happy to have our assistance. On January 18th, 49 other students and I, teamed up in 25 pairs with a firefighter and personnel from Coopers and Lybrand and Kosair Hospital's SAFE KIDS Program to canvass over 800 homes in the neighborhood where the fire took place. We checked homes for inoperable smoke detectors, replaced old batteries where needed and installed over 470 smoke detectors that we had helped purchase. Three months later in April, a woman's home in which we had installed a smoke detector, caught on fire. She wrote the fire department and said the smoke detectors had saved the lives of her family members.

This canvass was so successful that the fire department called on us again, in March of 1991, to canvass another neighborhood. Again, we teamed up with firefighters and Coopers & Lybrand personnel and passed out fire safety and prevention pamphlets to over 1,100 homes. Coincidentally, several of our students discovered a kitchen fire in progress while canvassing and quickly alerted the fire department. A burner had been left unattended on a stove, but the quick action of the students and firefighters saved the home.

As a result of our volunteer work with the Louisville Fire Department, the Highland. Middle School Student Leadership Institute was presented the prestigious

Golden Trumpet Award by The Louisville Fire Prevention Council in October, 1991, for "countless hours of volunteer service given to the Louisville Fire Department's Operation Firesafe '91 campaign. The results of their tireless efforts to provide the highest level of fire safety to citizens of our community during the year 1991 will undoubtedly impact fire safety into the 21st century."

As you can see, we have formed a lasting friendship with the Louisville Fire Department. We have eaten hot dogs and fire house chili in a fire station, and in turn, hosted a Firefighters' Appreciation Day and Breakfast in May, 1991, for over 50 firefighters, including Chief Russell Sanders and Lt. Col. Cummins. Before breakfast, the firefighters went to every classroom in the school and talked about fire safety and prevention. Again this year, in March, we hosted the firefighters during the Jefferson County School District's Business/Community Organization Appreciation Day. A brunch was held in our school library for firefighters and other community dignitaries, including our superintendent, the 1992 National Superintendent of the Year, Dr. Donald W. Ingwerson.

We are continuing to volunteer with the Louisville Fire Department. On October 11th, we will be working with the Louisville Fire Department during the "Great Louisville Fire Drill," which will be held in Louisville's Seneca Park. We will be teaching children, ages kindergarten through sixth grade, good fire safety behaviors. In a program sponsored by the National Fire Protection Association and funded by a grant from the All State Insurance Company, we will be visiting preschoolers in every day care center in the city with the firefighters to teach the eight learning objectives for fire safety:

(1) Stop, drop and roll;
(2) Cool burns with cool water;
(3) Know your street address;
(4) Have a working smoke detector on each level and in each sleeping area of your home;
(5) Have two escape routes from each bedroom;
(6) Have a predetermined meeting place for family members;
(7) Change batteries in smoke detectors twice yearly;
(8) And, keep matches and lighters out of the strike range of children.

For senior citizens, we will be involved in a program called, "Let's Retire Fire," which will explain to senior citizens the causes of fires and how to prevent them. Students from our Student Leadership Institute will convey the information with firefighters door to door.

As our mayor, Jerry Abramson has said, "I consider Chief Sanders one of the most innovative firefighters in the nation." Under Chief Sanders' leadership, annual fire deaths have been reduced from an average of 15 per year prior to 1985, to an average of 10 per year since. Property damage losses have been reduced by 15% and the annual number of fires by 28% since he became fire chief in 1986. Chief Sanders stated, "If we have to go beyond education (to fight fires), we are into a system of failures. That's when people die and firefighters are injured." Also, there has been a 17.4% drop in the number of injured firefighters in 1992 alone.

We have developed a mutual respect and friendship with Chief Sanders, Lt. Col. Cummins and all of the firefighters. We know the firefighters have confidence in our generation and our ability to make significant contributions to our community. Other communities could learn from our example. Young people should be seen as community resources, rather than liabilities. This has been our experience in Louisville. We feel like we are significant contributors to the welfare of our community.

In closing, it is impossible to tell you how much we have learned and benefited from these friendships. It is also impossible to determine how many lives have been saved due to the combined efforts of our Student Leadership Institute, Coopers & Lybrand and the Louisville Fire Department. But one thing I can say for sure, "Without a doubt, fire education and prevention are the best fire safety measures."

Chairwoman SCHROEDER. Mr. Spaulding, we welcome you.

STATEMENT OF ROMEO O. SPAULDING, PRESIDENT, INTERNATIONAL ASSOCIATION OF BLACK PROFESSIONAL FIRE FIGHTERS; DIRECTOR, COMMUNITY RELATIONS AND PUBLIC FIRE SAFETY EDUCATION; LIEUTENANT, DISTRICT OF COLUMBIA FIRE AND EMERGENCY MEDICAL SERVICES DEPARTMENT, WASHINGTON, DC

Mr. SPAULDING. Thank you, Madam Chair.

To the distinguished members of this most honorable committee and to your panel guests who are here on the committee this morning, good morning. It is a pleasure to be here on behalf of, one, I guess the District of Columbia Fire Department on whose behalf I will be speaking and representing and also the International Association of Black Professional Fire Fighters.

You have my written testimony which I will not read from. It has some statistics and information that will be in the record. But I would like to just briefly highlight some other areas as we approach this particular interesting area of fire safety.

As I have been in the fire service for over 26 years and specifically working in the educational area for this entire time and for the past five years being the Director of Community Relations and Public Fire Safety Education for the District of Columbia Fire Department, I have seen a lot of tragedies, a lot of changes and a lot of things that need to be addressed within this particular area.

First, I would like to say, one of the things that, as we approach fire and rescue departments across the country, we have been advocating—and this now on behalf of the International Association of Black Professional Fire Fighters—is that they change their mission statement to incorporate the language that they are not just a fire department but they have a responsibility for what we call fire loss control management. That gives them a broader perspective to properly address the kinds of services they need to be delivering to the community.

In that, you can highlight and put at the top of your agenda, fire safety, fire safety education and the education initiatives. What happens if that does not happen, is that the fire service will still be involved in what we call reactive delivery of services. That is, after the fire has occurred—or after the failure has occurred, then we respond. We have taken that particular component and made it into a hero kind of facade.

If you are effecting the rescues, pulling what we call the burned bodies out of buildings, going up the ladders; these are the kinds of things that were highlighted, and we have done this for a number of years.

As we look at the fire service today, we find that, on the one hand, there is an area where we say we want fire safety to be number one. But when you look at how we approach this area, we find that, indeed, it is not the case. Because we have never changed the process in determining who the heroes really are.

So, therefore, what you do is, you place within the minds of your fire fighters, your line fire fighters, the idea that the main focus of their service is to actually deal with fire fighting or fire combat.

It is very difficult to deal with what we call the mind change of the provider after they have been in the service for some time. So, in order to compensate in that area, one of the things that had been recommended is that fire safety education and the entire initiative be placed at the beginning of their training, that is at the recruit school, making that important and then following through with initiatives as they go through the service, thereby making it a salient part of the service.

The chief of the department, the city and the community would then highlight those who are providing services such as Ms. Grant

was talking about, getting the Golden Trumpet Award, getting those high awards for being involved in this type of activity. That is how you deal with that.

The other area that we looked at in this particular—I guess you can call it—facade was what was happening with the American public. One of the major problems we found as we looked at the fire statistics was that we have a people problem. Within this people problem there is a behavior component with it. How do we change the behavior patterns of the American public? That is where we had focused our educational initiatives.

Sometimes—within the educational component we sometimes missed the point in reaching those areas in what we call behavior modification perspectives. With that, we had gone back and looked at what we were doing. We found we were dealing with areas that were sort of injurious to cultures, you know, different ethnic groups. So we had to add in cultural diversity.

Then we found we had to go back to the fire service community and say to the line fire fighters, "We need to re-equip you on how to deal effectively with the public which you now serve." That, basically, brought us to the point of looking at—and I am now going to switch over my hat to the District of Columbia Fire Department—to what kinds of programs would be effective and where they should be.

What happened in the District of Columbia Fire Department was that we focused on the third and fourth graders with a program called the Junior Fire Marshal Program. This program deals with the basic fire safety behavior modification initiatives, and it involved 126 elementary schools allowing us to reach over 12,000 young people each year.

Then, to take it higher than that, there is a Junior Fire Marshal Corps which is similar to what Ms. Grant was speaking to at the junior high school level in which the fire department itself adopts a junior high school and works with the schools in general to focus the junior high setting on fire safety at a higher level.

Then it is involved in a third component which is called a Fire Cadet Program. The Fire Cadet Program is to reach our youth at the high school level, bringing them out of the high school environment, offering them employment with the fire service. That employment gives them hope, gives them the ability to move from the school setting into the world of work. Then it also takes them into what we call the fire service by giving them all the skills and abilities they would need to have in order to be a successful fire fighter.

One of the first things they must do is be involved in fire safety education. They get a good dose of that. They are the first members that have received this training within this particular department. So, therefore, you have a ready developed corps of people who have a different perception of the fire service and what is important than those we had on board from previous entry level methods.

So, basically, that is how it is done here in the District of Columbia.

There is also a smoke detector giveaway program. It is tragic that the time when you get inundated with requests is after a tragedy. There have been many years passed since we started this initiative. We have looked at the fire deaths among our children and

have found them to be rather high. The fire deaths in general in the District of Columbia have been running at approximately 32. Basically, since we have been working vigorously to reduce this number, our fire deaths have dropped to 10, with a high of 16. We have looked at anywhere from a 40 and sometimes 50 percent reduction. For something like five years we had zero fire deaths in the 18 and under age group which meant that our programs were working.

Basically, what happened in the last year was the first time that we had fires where there were not only children involved but we had multiple deaths of young people. That caused us to refocus on what is the problem in this particular area. What we have found is that within America we have a problem understanding what fire is. We have used the term "fire" and as we say "fire" we do not distinguish what type of fire it is we are talking about. That creates confusion.

I did an experiment with some children from Africa and some children from America. I found out that the children from Africa knew how to handle fire very adult-like. They were trying to caution the children from America.

What happened with the children from America, we used the term "fire" and we did not distinguish what fire is. Fire is fire. On the one hand, when they see the uniform and the fire department that tells them that we are speaking about hostile fires. If you are looking at fire in general, there is fire that is used within the residential facilities to do all kinds of things, cook, heat, and those are the necessary types.

When we use the word "fire" it is confusing. Many cultures have two words for fire which they impart to their children, thereby having them respond very effectively to what we call fire safety. In America, because we use the one word for fire, it is very difficult to separate that. That is why we need to have a more vigorous approach to education.

So, those are some of the things we have seen and some of the things that we have been addressing as we approach not only children but adults.

Even adults have some difficulty understanding what fire is when we use the term "fire." Even if we take it back into the fire service community, that sometimes is confusing because it is the way we have handled the term "fire" and approach it in America.

We have developed some of the highest technology to deal with providing safety, but when it came to providing the behavior modification ingredients to the public, that was not done. As a result of that, we find we have to retune not only the approaches we have but also those within the fire service as a whole.

I was just giving you some statements to focus you in on some areas that are outside the statistics and the other programs you heard about this morning. I would like to say that the District of Columbia Fire Department is involved in every one of the programs that was mentioned here.

In the juvenile fire setter program, which we have modified, one of the things that I can say is that we have a 100 percent success rate with all the children we have worked with in counseling for juvenile fire setting. I don't know exactly why they have asked me

that at Children's Hospital. We have done it at Children's Hospital, and it has worked there also.

We would like to be able to do it more. We have modified it, looked at it, and monitored it, and it is working. Maybe we will try to see if it will fit into a package and see if we can give it to someone else and see if it will work in other areas.

Those are just some of the things we have been working with in the District of Columbia Fire Department, and a lot of those efforts were brought in by the International Association of Black Professional Fire Fighters. It is very difficult sometimes to separate the two. First of all, we were focusing on what was happening in the African-American community. We said if we can resolve the problem there and if we can resolve the problems in economically deprived areas, then we can resolve the problem of America.

The other problem that we saw that was shrouded with the whole fire service question was one of economics. There is something that, I guess, is out there that tends to provide or not allow to be provided the kinds of initiatives that should be embodied within your fire service or fire safety approaches. It is all hinged on the economic factor, even in the economically deprived areas, because normally those individuals are not the owners of those residences.

Then you look at what is going on from an economic and social situation, and you will find something different. So, therefore, we would need to look at that and sort of address what needs to happen there.

I think some of the earlier ones mentioned codes and legislative initiatives. They should indeed be looked at. They not only should be looked at, they should be followed. What you find in many cases is that they are not. As a result of that, you still have the same things happening over and over.

Thank you very much.

I see my good friend up there, Congressman Curt Weldon, who has labored very vigorously all over this country dealing with the same issues I have been talking about. I would like to say that he has done a tremendous job and, as a result of that, many of the kinds of initiatives that we are speaking about here came to fruition.

Thank you.

Chairwoman SCHROEDER. The Chair would also like to say that Congressman Weldon is the Chairman of the Congressional Fire Services Caucus. He has been terrific in providing a lot of leadership, and he was one of the instigators for having this hearing. You are very correct in pointing that out.

[Prepared statement of Romeo O. Spaulding follows:]

PREPARED STATEMENT OF ROMEO O. SPAULDING, PRESIDENT, INTERNATIONAL ASSOCIATION OF BLACK PROFESSIONAL FIRE FIGHTERS; DIRECTOR, COMMUNITY RELATIONS AND PUBLIC FIRE SAFETY EDUCATION; LIEUTENANT, DISTRICT OF COLUMBIA FIRE AND EMERGENCY MEDICAL SERVICES DEPARTMENT, WASHINGTON, DC

To the Honorable Patricia Schroeder, Chairwoman of the House Select Committee on Children, Youth and Families, distinguished members of this most noble Committee, good morning.

Thank you Madam Chairman for inviting the International Association of Black Professional Fire Fighters (IABPFF) to give testimony before this Committee on the subject of "Fire Safety: Protecting Our Children and Families."

I am Romeo O. Spaulding, President of the IABPFF, a fraternal organization made up of over 8,500 firefighters and fire service professionals. The IABPFF was organized in 1970 with one of its focuses on reducing the severe impact the fire problem had on African-Americans and other minority communities.

The highest percentage of fire deaths occurring in residential facilities affect African-Americans -- we make up 74% of this category. When we examined this statistic closer, it revealed that our young children and senior citizens were at the highest risk of our population which comports with the national reflection of fire death statistics.

BEST COPY AVAILABLE

The International Association of Black Professional Fire Fighters introduced to the fire service the concept of the National Community Volunteer Fire Prevention Program, which is now operated by the U.S. Fire Administration.

We have also worked with the National Fire Protection Association in revisiting their fire safety education curriculum with an emphasis on reaching this at-risk population. However, as we reviewed the attitude presently displayed by many fire departments, we have found that there is a deficiency in the effectiveness of many fire safety initiatives for at-risk communities.

With this in mind, the International Association of Black Professional Fire Fighters has aggressively sought to embody ethnic diversity and sensitivity awareness for all fire and burn safety education specialists. We have also encouraged all of our chapters to become active participants in fire safety education programs for the youth in our communities throughout the nation.

We know that if this component is added to the present strategies and educational methodologies, it alone will serve to improve vastly the behavior modification response of the targeted population.

Thank you.

FIRE AND BURN SAFETY EDUCATION PROGRAMS FOR SCHOOL AGE YOUTH IN THE DISTRICT OF COLUMBIA

Good morning Madam Chairman and distinguished members of this honorable and noble House Select Committee on Youth and Families. I am Lieutenant Romeo O. Spaulding, Director of the District of Columbia Fire and Emergency Medical Services Department's Community Relation Unit. This unit is responsible for the development and implementation of the department's fire and burn safety education programs.

Within the service delivery arsenal of the D.C. Fire and EMS Department's fire loss control management strategies is located the fire and burn saety education program initiatives for all District residents and visitors. One such program that is designed specifically or 3rd and 4th grader's is the Junior Fire Marshal's Fire Safety Education Program.

Each year the D.C. Fire and EMS Department is able to reach over 11,000 3rd and 4th graders with this program. Many years, we were able to reduce child fire deaths within the District of Columbia to zero. However, during the past two years, there appears to have been a much higher number of our youth being victimizd by hostile fires. This fact alone concerns the Fire Chief who has recently issued a mandate that fire and burn safety education and fire prevention will be the major focus of the department's new initiatives to reduce the incidence and severty of hostle fires that has disproportionately affected African American and minority residents.

Normally, it is our youth and senior citizens that experience the highest percentage of fire deaths and injuries among our city's population. In order to mitigate this situation, the department has maintained an aggressive fire safety education program initiative for our children and youth through the schools.

DISTRICT OF COLUMBIA FIRE
AND EMERGENCY MEDICAL SERVICES DEPARTMENT

Community Relations Unit

JUNIOR FIRE MARSHAL PROGRAM

Sharon Pratt Kelly
Mayor

Rayfield Alfred
Fire Chief

Memorandum ● **Government of the District of Columbia**

TO: Elementary School Principals
3rd and 4th Grade Teachers

Department FIRE
Agency/Office ADM/CRU

FROM: James L. Edelen
Firefighter

Date:

SUBJECT: Community Relations Representative for the Junior Fire Marshal Program

It is a pleasure for me to present the **Junior Fire Marshal's Program** to you and your third and fourth graders today. I am one of the Public Fire Safety Education Specialists from the D.C. Fire and Emergency Medical Services Department's Community Relations/Public Education Unit.

You will be given a JFM Packet of information. I will then give a forty-five minutes to one hour presentation to you and your students today and leave with you a JFM examination for each student. Please allow each student to take the JFM examination within two weeks after this presentation. Each student who receivies 100% on the examination, submit their name(s) to me in the enclosed return addressed envelope. Note: Please do not send the examination to this office, only submit a memorandum containing the 100% achiever's. Each of these students will receive a *Junior Fire Marshal Certificate and Badge* which will be sent to your school. The certificate may be presented to the student during an awards program or assembly.

Thank you for sharing your time and class with me today. I am sure that this Fire Safety Education program will be greatly appreciated by all involved.

If you have any questions, please feel free to call me at 574-0451 or 673-3331, or write to:

D.C. Fire and Emergency Medical Services Department
Community Relations/Public Education Unit
1923 Vermont Avenue, N.W.
Washington, D.C. 20001

DISTRICT OF COLUMBIA FIRE AND EMERGECY MEDICAL SERVICES DEPARTMENT

JUNIOR FIRE MARSHAL PROGRAM IMPLEMENTATION FORMAT

STEP 1 Initial contact is made between the Office of the Fire Chief and the Superintendent of Schools.

STEP 2 Copies of the JFM Implementation Format, presentation format and contest guidelines will be sent to the DCPS Superintendent and School Administrator.

STEP 3 A Community Relations/Public Education Representative will be assigned to and responsible for JFM presentations for all Third and Fourth Grade students in all elementary schools.

STEP 4 The Community Relations/Public Education Representative will make an appointment with the principals in his/her assigned region to meet with all Third and Fourth Grade classes in forty-five minute assembly for each grade level if practical, on a specific day and time.

STEP 5 Principals and teachers will be presented copies of the implementation format, presentation format, contest guidelines and a memorandum confirming the JFM presentation and which also introduces the Community Relations/Public Education Representative.

STEP 6 The Junior Fire Marshal Presentation.

STEP 7 Third and Fourth Grade teachers will be responsible for administering the JFM Post-Test and forwarding them to the D.C. Fire and Emergency Medical Services Department's Community Relations Unit in the self addressed envelope provided them.

STEP 8 Teachers will also be responsible for encouraging the students to participate in either the poster or essay contest, (see attached contest guidelines). As soon as all of the participating contest students have completed the poster or essay work, the school should notify the Community Relations Unit for pick up. All posters and essays must be received by June 12, 1992.

NOTE: All posters and essays are to be submitted.

A poster and essay Grand Prize winner will be selected and they will serve as Junior Fire Marshals for the District of Columbia for that school year in which they are selected. They will also receive a $100.00 U.S. Savings Bond, a Mayoral Certificate of Merit, and a Gold JFM Certificate from the Fire Chief. This will take place at the JFM Luncheon on October 8, 1992.

STEP 9 All students participating in the JFM Program will receive a Junior Fire Marshal Certificate from the D.C. Fire Department therefore; therefore, the teacher is responsible for furnishing the participating student's name to the D.C. Fire Department's Public Education Representative at 1923 Vermont Avenue N.W. Washington, D.C. 20001. A self addressed envelope will be provided for this purpose.

STEP 10 Community Relations/ Public Education Unit's staff will be responsible for selecting the grand poster and essay award winners from among all entries. The 1st place winners of the poster and essay contest will be the grand prize winners and their school will receive the grand prize cup on a shared basis (October 9, 1992 to March 12, 1993 for the poster winner and March 12, 1993 to October 1, 1993 for the essay winner). Also, there will be 2nd, 3rd and 4th place winners in each category.

60-327 O - 93 - 3

JUNIOR FIRE MARSHAL PROGRAM

DISTRICT OF COLUMBIA FIRE AND EMERGENCY MEDICAL SERVICES DEPARTMENT

Community Relations/Public Education Unit

TEACHER EVALUATION

SCHOOL_____

TEACHER'S NAME_____

GRADE_____ DATE_____

Please FILL OUT and RETURN TO:

D.C. Fire & Emergency Medical Services Department
Community Relations/Public Education Unit
1923 Vermont Avenue., N.W.
Washington, D.C. 20001.

Please include all "100 percent Examination Papers" when you turn in this REPORT. All classes will be sent certificates for all participating students. Remember, every student who now has a Fire Escape Plan is a BIG WINNER.

Number of students in your class_____

Number of 100% examinations submitted_____

PROGRAM WRAP UP

Please rate each below listed area using one of the following:

1 = EXCELLENT 4 = FAIR
2 = VERY GOOD 5 = POOR
3 = GOOD

Was this simplified program simple enough?

Did this program maintain your students' interest?

Did the film and visuals get across the fire safety message?

Would you like to have follow-up programs by the Fire Department?

Please jot down (on back of sheet) any other comments you feel may help us. Thanks again. Your input helps us in planning future fire safety education programs.

JUNIOR FIRE MARSHAL PROGRAM

DISTRICT OF COLUMBIA FIRE AND EMERGENCY MEDICAL SERVICES DEPARTMENT

Community Relations/Public Education Unit

ESSAY AND POSTER CONTEST GUIDELINES

INSTRUCTIONS TO TEACHERS AND STUDENTS:

I. Categories for rating essay and poster entries:

A. Content (use one or more of the following subject areas)

1. **Stop, Drop and Roll**
2. **Fire Triangle**
3. **Usefulness of Fire**
4. **Home Safety Survey**
5. **Smoke Detectors and the D.C. Smoke Detector Law**
6. **Exit Drills in the Home**
7. **Fire Drills in the School**
8. **Crawl in Smoke**
9. **False Alarms**

B. Originality
Neatness
Effectiveness

II. General Rules and Regulations

A. This contest is open to all D.C. Public Schools third and fourth grade students.

B. Poster and essays must reflect the work of the students themselves.

C. At the lower right hand corner of the back of each poster and each essay, attach the following information:

Name of student
Name of school
Grade
Name of Teacher
Home telephone number

(PLEASE PRINT ALL INFORMATION)

III. Specific Rules and Regulations

A. Essay Contest:
1. 300 words or less
2. Legible writing

B. Poster Contest:
1. Size: 22" x 28"
2. RESTRICTION: NO LIVE MATCHES placed on posters.
FIRE SAFETY QUIZ

FIRE SAFETY QUIZ

DISTRICT OF COLUMBIA FIRE AND EMERGENCY MEDICAL SERVICES DEPARTMENT

Community Relations Unit

Read each sentence below
Circle T if it is TRUE, F if it is FALSE.

Name: _____
School: _____

1. **Fires kill and hurt people every year. Many of these people are children.** T F
2. **Many fires are started by children playing with matches and careless smoking.** T F
3. **Three things are needed for fire: (1) heat (something hot), (2) fuel (something to burn, (3) oxygen (air).** T F
4. **All fires are bad.** T F
5. **Smoke can kill.** T F
6. **There is <u>never</u> a real fire when there is a school fire drill.** T F
7. **Parents must make our homes safe from fire because there is not much a child can do about fire safety.** T F
8. **Everyone that lives in my house should practice fire drills and know how to get out if a fire starts.** T F
9. **We should all try to help firefighters put out fire.** T F
10. **If your clothing catches fire you should run.** T F
11. **When the room you are in starts filling up with smoke you should crawl under the smoke to your exit.** T F
12. **When your smoke detector alarms you should turn it off.** T F
13. **To report a fire call "911".** T F
14. **Fire can be used to cook our food and heat our homes.** T F
15. **You should always know what to do in case of a real fire.** T F

JUNIOR FIRE MARSHAL PROGRAM

Chairwoman SCHROEDER. Mr. Brace, we are happy to welcome you. We are anxious to hear what you have to add from the State Fire Marshal's perspective. The floor is yours.

STATEMENT OF THOMAS R. BRACE, VICE PRESIDENT, NATIONAL ASSOCIATION OF STATE FIRE MARSHALS, WASHINGTON, DC; MINNESOTA STATE FIRE MARSHAL, DEPARTMENT OF PUBLIC SAFETY, ST. PAUL, MN

Mr. BRACE. Thank you, Madam Chair.

My name is Tom Brace. I am Vice President of the National Association of State Fire Marshals and for the past five years have served as State Fire Marshal of Minnesota.

For the 10 years prior to my Minnesota appointment, I served as State Fire Marshal for the State of Washington. I am active in many state, regional and national fire service groups and am a past president of the International Association of Arson Investigators.

Over those years, I have personally witnessed all manner of tragedies. I can say without reservation that there is only one thing worse than dying in a fire and that is barely surviving one badly burned.

Representatives of the United States Fire Administration will effectively describe the magnitude of America's fire problem in terms of total injuries and lives lost, property, jobs and lost tax revenue. But, after all of my years in the fire service, I am impressed by just one statistic, and it is relevant to today's hearings: Our youngest children—those under five years of age—are more than twice as likely to die in a fire than children and adults from five to 65, and children from low-income families are disproportionately at risk.

While America's fire losses remain unacceptably high, I am pleased to report that we have the tools and the techniques to prevent many fires and survive most others.

There is no guarantee once a fire occurs that the fire service will be able to respond in time to save lives. Unless the occupants are awakened by an early warning device to allow them time to escape and notify the fire department, they may die even if they live next door to a fire station.

Fire is the result of a sequence of failures and need not occur. The three major causes of fire in this country are not careless smoking, electrical and heating fires. They are men, women and children. Fires are caused by lack of knowledge, ignorance and carelessness.

In this nation, over $2.5 billion of property is destroyed each year. People die at an alarming rate, and children are the innocent victims the majority of the time.

Certainly, public fire safety education has helped make Americans more aware of fire hazards. The United States Fire Administration's education programs—most of which have been directed at children and families—are notable and available to all fire departments free of charge. Some private sector groups—for example, the insurance and tobacco industries, McDonald's corporation, and a few others—provide quality resources to local public fire safety

educators at no cost. However, these resources by themselves are not enough.

Fire code requirements have helped make homes much safer. Last month, our association petitioned the U.S. Consumer Product Safety Commission to adopt and enforce upholstered furniture flammability regulations nationwide. According to C.P.S.C., more than 1,200 persons annually die from the highly toxic gases and extreme heat generated from furniture involved in house fires.

Some day built-in fire protection, such as automatic fire sprinklers, will be in every American home. The Federal Fire Safety Act, a bipartisan measure introduced by Congressmen Boucher and Boehlert, is expected to become law this year and will require fire sprinklers in most new and renovated public housing. I cannot tell you how important this step will be in saving the lives of our most disadvantaged population—children.

But of all the resources and techniques available to us, none has yet accomplished as much as a simple, inexpensive device found in nearly two-thirds of all American homes: The smoke detector. Properly installed and maintained, smoke detectors help ensure a family's survival from fire.

But, to our great frustration, many homes still do not have functioning smoke detectors. There are two reasons: First, many low-income homes have never had a smoke detector installed despite the fact that these very same homes are those most at risk and likely to suffer a fire. Second, an increasing number of smoke detectors don't work generally because batteries are either removed, worn out or have been disabled.

Chairwoman Schroeder, we are speaking of millions of American homes, many of them exceptionally hard to identify and reach.

With a generous contribution from the Philip Morris Company, late last year our association was able to purchase more than 85,000 smoke detectors equipped with fresh batteries. The challenge was to work with the American fire service to identify and provide smoke detectors to low-income families with children.

We asked our 51 members to propose ways of distributing detectors to low-income families in each of their states and, ultimately, we selected 27 proposals. Let me share these examples:

In Wisconsin, fire officials targeted poor, often illiterate Southeast Asian families and worked closely with community service organizations to install detectors in several thousand of their homes.

In Pennsylvania, the program concentrated on several thousand families with "latchkey children," those youngsters who return from school to an empty house.

In Oklahoma, our detectors ended up in thousands of mobile homes. By way of history, about the time manufacturers were required to make mobile homes more fire safe, a fair number of substandard units were sold in Oklahoma. As a result, Oklahoma has one of the highest fire death rates in the U.S.

In Alaska and in my own state of Minnesota, we placed detectors in the homes of Native American families. In other states, we focused on inner-city families or on the rural poor.

The last of the detectors were installed quite recently and so we have not yet evaluated the results of our effort. But, within weeks of the smoke detectors first arriving, we had already learned of

families whose lives had been saved because of these smoke detectors.

In Houlton, Maine, the Potter family's mobile home burned to the ground as a result of an improperly installed wood stove. However, because of a properly installed smoke detector, all five members of the Potter family were able to escape.

In Minnesota, four families, two on an Indian reservation and two in rural Minnesota, were alerted and escaped from the life-threatening fires in their homes.

In Oklahoma, not one fire has been reported in any of the mobile homes recently equipped with smoke detectors. Byron Hollander, the State Fire Marshal in Oklahoma, considers that a miracle.

We have already started to raise monies to purchase more smoke detectors. Our NASFM challenge is 500,000 more smoke detectors, and once we have provided them, we will seek another 500,000. Our organization also is proud to report that we participated actively and enthusiastically in the U.S. Consumer Product Safety Commission's excellent smoke detector program this past year, and we have sponsored billboards in five states reminding families to maintain their smoke detectors.

Because of public fire safety education, code enforcement, smoke detectors and—someday—widespread use of fire sprinklers, we will do a far better job of protecting children and families from fire.

When I began my testimony, I listed my professional credentials but left my personal qualifications out. I am a parent with two daughters. Both are now adults, and it always was one of our highest goals to provide them with the knowledge to protect themselves and to see them grow up in as safe an environment as possible. All children deserve as much, whether we are protecting them from abuse, assaults or fire. America's fire service has no higher priority.

Thank you.

Chairwoman SCHROEDER. Thank you. That was a very eloquent conclusion.

[Prepared statement of Thomas R. Brace follows:]

PREPARED STATEMENT OF THOMAS R. BRACE, VICE PRESIDENT, NATIONAL ASSOCIATION OF STATE FIRE MARSHALS, WASHINGTON, DC; MINNESOTA STATE FIRE MARSHAL, DEPARTMENT OF PUBLIC SAFETY, ST. PAUL, MN

My name is Tom Brace. I am vice president of the National Association of State Fire Marshals, and for the past five years have served as State Fire Marshal of Minnesota. For the ten years prior to my Minnesota appointment, I served as State Fire Marshal for the State of Washington. I am active in many state, regional, and national fire service groups and am a past president of the International Association of Arson Investigators.

Over those years, I have personally witnessed all manner of tragedies. I can say without reservation that there is only one thing worse than dying in a fire and that is barely surviving one badly burned.

Representatives of the United States Fire Administration will effectively describe the magnitude of America's fire problem in terms of total injuries and lives lost, property, jobs and lost tax revenue. But, after all of my years in the fire service, I am impressed by just one statistic and it is relevant to today's hearings: our youngest children -- those under five years of age -- are more than twice as likely to die in a fire than children and adults from 5 to 65, and children from low income families are disproportionately at risk.

While America's fire losses remain unacceptably high, I am pleased to report that we have the tools and the techniques to prevent many fires and survive most others.

There is no guarantee once a fire occurs that the fire service will be able to respond in time to save lives. Unless the occupants are awakened by an early warning device to allow them time to escape and notify the fire department, they may die even if they live next door to a fire station. Fire is the result of a sequence of failures and need not occur. The three major causes of fire in this country are not careless smoking, electrical, and heating fires; they are **Men, Women and Children.** Fires are caused by lack of knowledge, ignorance, and carelessness.

In this nation over $2.5 billion dollars of property is destroyed each year; people die at an alarming rate and children are the innocent victims the majority of the time.

Certainly, public fire safety education has helped make Americans more aware of fire hazards. The United States Fire Administration's education programs -- most of which have been directed at children and families -- are notable and available to all fire departments free of charge. Some private sector groups -- for example, the insurance and tobacco industries, McDonald's corporation, and a few others -- provide quality resources to local public fire safety educators at no cost. However, these resources by themselves are not enough.

Fire code requirements have helped make homes much safer. Last month our association petitioned the United States Consumer Product Safety Commission to adopt and enforce upholstered furniture flammability regulations nationwide. According to C.P.S.C., more than 1,200 persons annually die from the highly toxic gases and extreme heat generated from furniture involved in house fires.

Some day built-in fire protection, such as automatic fire sprinklers, will be in every American home. The Federal Fire Safety Act, a bipartisan measure introduced by Congressmen Boucher and Boehlert, is expected to become law this year and will require fire sprinklers in most new and renovated public housing. I cannot tell you how important this step will be in saving the lives of our most disadvantaged population - children.

But, of all the resources and techniques available to us, none has yet accomplished as much as a simple, inexpensive device found in nearly two-thirds of all American homes: the <u>smoke detector.</u>

 BEST COPY AVAILABLE

Properly installed and maintained, smoke detectors help insure a family's survival from fire. But to our great frustration, many homes still do not have functioning smoke detectors.

There are two reasons:

* First, many low income homes have never had a smoke detector installed despite the fact that these very same homes are those most at risk and likely to suffer a fire.
* Second, an increasing number of smoke detectors don't work generally because batteries are either removed, worn out, or have been disabled.

Chairwoman Schroeder, we are speaking of millions of American homes, many of them exceptionally hard to identify and reach.

With a generous contribution from the Philip Morris Company, late last year our association was able to purchase more than 85,000 smoke detectors equipped with fresh batteries. The challenge was to work with the American fire service to identify and provide smoke detectors to low income families with children.

We asked our 51 members to propose ways of distributing detectors to low income families in each of their states, and ultimately, we selected 27 proposals.
Let me share some examples:

- In Wisconsin, fire officials targeted poor, often illiterate Southeast Asian families and worked closely with community service organizations to install detectors in several thousand of their homes.
- In Pennsylvania, the program concentrated on several thousand families of "Latch-Key Children," those youngsters who return from school to an empty house.
- In Oklahoma, our detectors ended up in thousands of mobile homes. By way of history, about the time manufacturers were required to make mobile homes more fire safe, a fair number of substandard units were sold in Oklahoma. As a result, Oklahoma has one of the highest fire death rates in the U.S.
- In Alaska and in my own state of Minnesota, we placed detectors in the homes of Native American families. In other states we focused on inner city families or on the rural poor.

The last of the detectors were installed quite recently and so we have not yet evaluated the results of our effort. But, within weeks of the smoke detectors first arriving, we had already learned of families whose lives had been saved because of these smoke detectors.

In Houlton, Maine, the Potter family's mobile home burned to the ground as a result of an improperly installed wood stove. However, because of a properly installed smoke detector, all five members of the Potter family were able to escape. In Minnesota four families, two on an Indian reservation, and two in rural Minnesota, were alerted and escaped from the life threatening fires in their homes. In Oklahoma not one fire has been reported in any of the mobile homes recently equipped with smoke detectors. Byron Hollander, the State Fire Marshal in Oklahoma, considers that a miracle.

We have already started to raise monies to purchase more smoke detectors. Our NASFM challenge is 500,000 more smoke detectors and once we have provided them, we will seek another 500,000. Our organization also is proud to report that we participated actively and enthusiastically in the U.S. Consumer Product Safety Commission's excellent smoke detector program this past year, and we have sponsored billboards in five states reminding families to maintain their smoke detectors.

Because of public fire safety education, code enforcement, smoke detectors, and -- some day -- widespread use of fire sprinklers, we will do a far better job of protecting children and families from fire.

When I began my testimony, I listed my professional credentials, but left my personal qualifications out. I am a parent with two daughters. Both are now adults and it always was one of our highest goals to provide them with the knowledge to protect themselves and to see them grow up in as safe an environment as possible. All children deserve as much whether we are protecting them from abuse, assaults or fire. America's fire service has no higher priority.

(Visual Display)

Thank you.

Chairwoman SCHROEDER. I think we will yield first to our leader here on this issue because nobody could be more eloquent than he could. Congressman Weldon from Pennsylvania.

Mr. WELDON. Thank you, Madam Chair.

Let me apologize for being late for this very important hearing. As a matter of fact, I was upstairs in this building appearing before the Science and Tech Committee on the Federal Fire Protection Act which passed yesterday and testifying on the need for earthquake legislation, another issue that is very high on the priority list of the first responders in this country.

Let me start off by providing the highest praise that I can personally give to Pat Schroeder for chairing this very important hearing. Unfortunately, in this country we operate on a disaster theory. We don't act or listen until a major disaster occurs and then, when the national media is focusing on that tragedy, we say what can we do or what should we have done.

Because of her commitment to making sure that children throughout this country are given the opportunity to live, whether they be from Colorado or some other state, for that, I applaud you, Madam Chair, and I know the entire 1.5 million emergency responders in this country applaud you, many of whom are represented by these groups today.

Let me applaud you. For the last several years you have been in the forefront when perhaps this government was not responsive to your needs. You know what I am talking about.

I applaud you and your organizations for being out when there were not the ears perhaps listening both in the White House and in the Congress to the message you are all presenting. I think back to perhaps some of the years under a President of my party, Ronald Reagan, who tried to zero out funding for the Fire Academy and the U.S. Fire Administration for seven years. We all know that story. We know it was only because of the diligence of people like you and your organizations that the struggle was kept alive and the Congress, in fact, came through to continue the funding for the kind of programs Ed Wall talked about today.

We also know that perhaps FEMA was not as responsive in those years, and FEMA has now been totally reorganized in the direction of being more responsive to the nation's fire and life safety program.

We cannot just criticize the administration because we had a Congress that liked to talk about life safety but they were operating in buildings that would violate any basic building and life safety code in America, and you all know that, without detectors, without emergency exits, without sprinklers and without all the things we talk about in our cities, we were not doing them ourselves.

Thank goodness that has changed. The administration listened and has taken action, and now the Fire Administration is getting its funding and hopefully will continue to get that funding, and the Congress is responding. H.R. 94, which is now law, is the first sprinkler bill in the history of this country, for the first time requiring Federal people to stay in fully protected buildings. The Federal Fire Safety Act, moving through the Senate now, will for the first time begin to require protection in our Federal installa-

tions, especially public housing and military installations, and other concerns where we have not just given the kind of support for safety concerns.

I want to say to you, it is working. Your message is getting out loud and clear. It is only because of the continued perseverance of your organizations and your members that the government is responding.

I want to highlight a few facts that I would think are critical to get in the record. You may comment on these.

There are a number of good programs out there. We could have NFPA here, all the programs they have, what they did with Dick Van Dyke in the Stop, Drop and Roll Program, and the other public awareness programs. We would talk about, as you have, the Consumer Product Safety Commission, the Chiefs' association, the IAFF and their programs, and all the groups represented up here, including the National Criminal Justice Association's program in cooperation with the National Governors' Association which has done a fantastic job at public education in the area of life safety.

There is a national embarrassment that America has the worst fire loss record of any industrialized country in the world, the worst rate of loss of life and the worst in terms of loss of buildings and property. We destroy a lot of our economic capability simply because we don't know how to deal with the issue of fire and life safety. 5,500 people die each year, 1,400 children. And on top of that, which has not come out here, 125 of your colleagues die each year trying to rescue those kids and people. Each year we honor those people in Emmitsburg as we pay tribute to their heroism.

People don't usually die from fires. They die from the gases and toxic smoke that envelops the building where they are. Most of us in Congress and I think nationwide think that people die in large apartment buildings, in large complexes when, in fact—and I hope you will comment on this—the bulk of the fires and the loss of life occur in one- and two-family dwellings, where families live.

Furthermore, we think by somehow having effective fire departments—and this was mentioned by Russell—that somehow we can stop the loss.

The first two or three minutes after the beginning of the fire is the critical time period. If we don't get the people out then, regardless of the capability of the fire department, in most cases it will be just too late. Those are important facts we need to keep in mind. They point to what you have been talking about. That is the need to require smoke detectors in every residential complex in this country.

Going beyond that, we would love to have sprinkler protection, but at least smoke detectors, to give people a chance to get out. I think and I hope you respond that we should be doing everything in our power to make detectors available in the poorer communities and to make sure that we are using every means possible to encourage families to not just install smoke detectors but follow through on the update of the battery operated, like the Chiefs' program, "Change Your Clock, Change Your Battery", and some of the other programs that encourage families to keep the smoke detectors operational.

I thank you all for coming in. I want to let my other colleagues speak and ask questions, but if you care to respond to the points I raised, I would be glad to have your comments. I think those are the kinds of things we talked about in terms of need to deal with prevention and response early on, before the fire department is notified.

Thank you for coming in today.

Chief SANDERS. Thank you, Congressman Weldon. It is good to see you today.

Without question, Congressman Weldon has provided the lead in this nation in fire safety. We were in chaos before your leadership. Those facts are exactly right: 78 percent of the fire deaths in this country occur in one- and two-family dwellings. It is these families most at risk, the low-income, children, elderly, the groups we spoke about earlier.

In my experience, as I noted, in 25 years and well over 1,000 fires and at least 100 fire deaths, every single needless death could have been prevented with a working smoke detector, about a $6 investment that would have saved the children and the family. That is a horrible thing to have to live with when we know it could have been prevented.

Ms. FEELY. We have a statistic that says the chance of dying in a residential unit is cut in half when a working smoke detector is present. Even with that, you have a better chance, but you are not completely in the clear. One of the reasons that is true is because you only have about two or three minutes to get out of the house once the smoke alarm goes off.

So your family has to practice some type of escape plan. You have to get together and you have to say if this thing goes off this is what you have to do, because you don't want your children hiding and have to look for them because that eats up precious time.

While education of this type is absolutely critical—I mean, how much families are really aware of the kind of statistics and information that we have talked about here—and, although education is critical, I think the most effective formula for preventing these deaths and even fires perhaps is to combine education with technology with legislation and regulation. We have found, whether it is with a smoke detector or a child's safety seat or even a bicycle helmet, laws and regulations are really what reduce deaths and injuries.

Mr. SPAULDING. As you look at those statistics and you focus on the African-American community you find something staggering. In the District of Columbia I have—I can say there have been years when 100 percent of the fire deaths were Afro-Americans. If you take the large metropolitan areas around the country you would find a high percentage of fire deaths and even in the rural areas are comprised of African Americans. Basically 75 to 78 percent of those individuals who are dying are of the Afro-American heritage which means that the brunt of this problem falls upon Afro-Americans as you look at it.

As I think one of the earlier witnesses spoke about the disproportionate statistics with reference to this, it says something when you start looking at the real victims of fire in this country. You will see

they are found mostly in the kind of environments that produce that, which goes back to what Congressman Weldon was speaking of, where the fires are occurring.

Mr. BRACE. Certainly looking at national statistics it has been testified this morning that anywhere from two-thirds up to 80 percent of the homes in this country have smoke detectors, but at any given time only about half of them work.

We talked about education and raising public awareness and a number of very significant programs that try to tell people to be more responsible, to be more aware of what can happen, how dangerous fire is. And the comment about needing a different word for fire—somehow the word "unfriendly fire" does not quite measure up to the major devastation that is caused by a tragic fire.

I am wondering—and I ask the question rhetorically—that maybe there is also a role here for enforcement. We have in many states statutes that say if you are a property owner, a nonresident of that property, an absentee landlord, you are required to see that that building has smoke detectors in every unit if it is an apartment building. There is some prosecutorial liability should that property owner not provide a working operable smoke detector.

When we get to the single-family residence, that is one of the last great bastions of our American society. There are very few government entities, Federal, state or local, that can enter a single-family residence, and yet that is where people are dying as was so eloquently testified to.

In Minnesota, we use public health nurses to get into these homes. They are one of the few groups who have access. We have taught them how to check and install smoke detectors, given them a screwdriver and a little step stool to stand on. They are most interested in helping us. They are a helping, caring group of people.

One of the tragedies, it seems to me, is that in our society, when people have a fire, the first reaction is, "Were you insured?" Maybe the second question is, "Was anyone hurt?" That kind of attitude, I think, needs to be changed. We need to look at the question of if somebody gets in an automobile and drives down the highway inebriated—we have seen what has happened with our laws in that arena. But if someone in their homes gets inebriated and falls asleep in a chair with a burning cigarette and two children perish, our sympathy is to the person who lost their home and their family. Somehow, I think we need to redirect that sympathy and possibly there is a way here.

Chairwoman SCHROEDER. Congressman Martinez.

Mr. MARTINEZ. I was listening to the testimony. The focus has been on smoke detectors. One of the problems I have, although I understand the importance of a smoke detector and it was mentioned here a couple of times, if a smoke detector does not have batteries in it—Ms. Grant said they found in inspections there were a lot of dead batteries. That seems to be a very preventable problem, more than people realize. So the detector is absolutely not any good.

It seems to me that when smoke detectors first came out they were not all battery operated. Some were connected to home electricity. I am wondering why we don't require that. You generally put them on the ceiling. You always have a light fixture on the

ceiling. Just simply putting a light socket in there that has a plug to plug the smoke detector in would take care of that situation. It doesn't seem to me to be that hard or difficult.

After saying that, that is not really the heart of my problem. You touched on it with the laws on drunk drivers. More importantly, you are talking about the loss of a home rather than loss of life or children.

I am wondering, do insurance companies disqualify home owners if they don't have smoke detectors? Or, if you are talking about the individual home, that it is hard to get in and inspect them, isn't it possible that insurance companies could write that into their policies to have it enforced? They stand to lose a lot if the person does not have a smoke detector because they will alert the fire department sooner.

Smoke detectors, like burglar alarms, can be wired into the apartments. There are a lot of things that can be done. Have the insurance companies looked at forcing people to get working smoke detectors in order to protect their losses?

Mr. BRACE. Congressman Martinez, you have asked a number of questions. Let me try to go through them and invite any other panel member to chime in.

In new construction, under most building codes—and there are three major building codes in this country—hard-wired smoke detectors are required. The problem is, in brief, that we are not having the number of fires in new construction that we are having in some other pre-existing construction. The industry does make a hard-wired smoke detector with the battery backup. It is the belt and suspender argument. If you have a power outage, the battery kicks in.

I agree with you in terms of a battery-operated smoke detector or a hard-wired that is not operational is worse than no smoke detector at all because it gives up a false sense of security.

In terms of insurance industry incentives, I think that some insurance companies give discounts for fire and burglar alarms and some for off-transmission alarms to a central station and some for residential sprinklers. I think the insurance industry needs to be encouraged and educated in terms of offering more incentives. It is a very conservative industry and sometimes slow to respond. I would argue that we have some education to do with the insurance industry.

But I would put one codicil of caution in the area of consumer protection. Let's be careful that we don't give the insurance industry one more reason not to pay. What we are really trying to do is protect people, children, and the elderly.

I still think it comes back, though, to the basic responsibility of that adult in that particular residence to maintain and see to it that a smoke detector is installed and maintained. If not for himself or herself, certainly for the children and the elderly that may be part of that dwelling unit.

Mr. WELDON. Would the gentleman yield?

Mr. MARTINEZ. Yes, I will yield.

Mr. WELDON. I agree with everything Tom said. To a large extent, building and fire prevention codes are totally locally determined. Either the state will enact an ordinance or it will be done

by the local municipality. We still have, I believe, nine states that have no smoke detector ordinance. It becomes a problem, you know, the states' rights issue forcing the states to do something they don't want to do. That might be a battle we perhaps could not win.

I would like to have you talk about some of the things we could do.

Tom, you talked about the 15 percent premium they offered. If you look at all the ways the Federal Government subsidizes housing in this country—military housing on the bases, Section 8 houses, foster care homes—we provide $9 billion a year for children to go into foster homes, Federal subsidies. Take all the FHA and VA mortgages—if you take all those areas where we affect housing and just apply this to those—I don't know the estimates, but it has to be a significant portion of the housing in this country. When you talk about all the mortgages that the Federal Government runs through existing agencies——

Mr. WALL. I would like to be sure that this select committee does not lose sight of the fact that smoke detectors are not the cure-all for fire in this country. A smoke detector has never prevented a fire yet. A smoke detector has never extinguished a fire yet. It will increase by 45 to 50 percent your chance of survival in getting out of the house.

If we could put smoke detectors in every dwelling unit in this country and have them all working perfectly all the time we are only doing half the job. The other half of the job is not as easy. Technology is always an easy out. We work with people who think if you put something in a computer everything that comes out is gospel. Don't think that way about smoke detectors.

The other half of this question is public education and changing behavior. Tom mentioned in Oklahoma a very high risk group of substandard mobile homes they put smoke detectors in. Lo and behold, there is no fire there for at least the first year. Do you think it was because the smoke detectors are in there? It was people who became more aware and took other precautions.

People will do other things rather than attaching a smoke detector into the ceiling. They will look at other risks. Until we change the behavior of people in this country we are not going to cut down fire loss.

In Europe we say they live in crowded conditions, yet when I was talking to the local fire chief in Stockholm he told me one person died in the last five years. Why is that? We have a different culture. We use it up and throw it away. We think about housing and people the same way. We don't think we should be responsible for our actions. We have to take some personal responsibility in seeing that we do things to supervise our children better, ourselves better, and to get rid of hazards in our home. That is the difficult part.

Chairwoman SCHROEDER. Congressman Martinez, do you have further questions?

Mr. MARTINEZ. I would like to make a comment on the last statement.

Education is the problem. The low socioeconomic people do not have that information, and we are not providing it for them. It is fine to be responsible for yourself, but before you can be responsi-

ble for yourself you have to be educated. There is a great lack of that in this country.

Let me get to an important thing, and then I will yield back the time.

When Ms. Grant talks about the program in Kentucky where they are doing a great job and you talked about the programs in your fire department and in your written testimony you outlined the things you have done, I think that is a marvelous pilot for a lot of other people to use.

Both of you can answer this. You know we have a great number of cities across this country, and we have 50 states. How many places have programs like we have heard about here? Because we always hear the right part that is brought before us to show us examples of what can and should be done, but we never get a real picture of what is going on out there. Maybe you can help us.

How many communities do you know of, since you are a national association representative—you mentioned Alabama, Pennsylvania, Minnesota, et cetera—how many places are really practicing the kinds of things, trying to mobilize people out there through the service clubs, YMCAs, YWCAs, to do the massive job of education that Mr. Wall talked about in order to cut down from the other side that tragic loss of life?

Mr. SPAULDING. Thank you.

Mr. Martinez, under the U.S. Fire Administration, the National Voluntary Fire Prevention Program does exactly what you just mentioned. In other words, in the communities across this country and the states it tries to solicit what type of programs were ongoing, what type of new programs and also to try to encourage the grouping that you talked about, the entire community to come together in fire safety initiatives. From that perspective, I don't know the exact numbers of programs, but they are basically in a lot of communities across this country.

Mr. MARTINEZ. But they are not universal?

Mr. SPAULDING. They are not universal. It is tailored toward the various communities where they are working.

What was attempted in that particular effort was to try to see what kinds of programs that we could package as national programs that would be workable in a multi-community situation across the country and also to educate other areas—what type of program initiatives are out there, how they worked, where they worked—so that we could develop a better strategy and deployment of fire safety programs.

However, there is one caveat to the whole issue. I think you were speaking to it earlier. It had to do with education. When we use the term "education," sometimes I think that term is used like the term "fire" that I was speaking about earlier.

What are we talking about when we talk about education? Sometimes, just the mere fact of providing something that has some information with it to a particular group is not necessarily education. We find sometimes that when we provide information to be read, information to be viewed, information of what we categorize as educational initiatives, when you look at the results of that you find that they are not workable.

So, basically, in the educational context, we have to readdress that to see what we are packaging in the approaches to make sure that they work. Sometimes, when you are dealing with an educational approach and if you are not careful about what you are doing and looking at the audience or population that you are trying to reach, you can actually, in fact, miseducate. That is something that America is gripped with right now in trying to deal with this whole education initiative.

I wanted to point that out so we wouldn't sort of jump on education and say that is the answer—which indeed it is—but we must look at the quality and type of education that is embodied in the approach.

Mr. MARTINEZ. And whether or not it reaches everyone or not.

Mr. SPAULDING. That is right. Then you need to look at what has happened with that.

One of the things you can find—and I guess I can say this for the record—is when you are dealing with people sometimes we forget people are people. What I mean by that is the basic needs of people are the same regardless of what categories or condition you find them in. When you stop trying to separate based on whether or not they are in a better economic or social condition or whatever and deal with their basic needs is what it takes to reach people, and you will find that your initiatives will tend to work.

We tend to have a different kind of approach if we go into a "respectable" neighborhood, and we have a different approach if we go into a neighborhood that is predominantly black, Asian or Hispanic. We often forget that they are people.

As a result of that, our initiatives, sometimes, and for the most part, miss the point. That happens even in our education system in America. We are asking what is wrong. When you look at that, you need to realize that people are people, and the basic needs are the same, and we must look to see how we are reaching that need rather than just putting something together.

There are a lot of efforts going on in just about each and every community in this country, but you must look to see whether or not they are on point. That is what needs to happen here. When you look at the area of fire safety and what needs to happen there, we still find a behavior problem with the American public, and that behavior problem is exhibited in all areas, even in the Congress.

I remember a few years ago when we were dealing with the congressional body here and were talking about a smoke detector issue, we were trying to get people to place smoke detectors in their homes. Finally, one of the Congresspersons admitted that he had a smoke detector, and it was in a box and, he did not have his own house protected.

That is a behavioral problem. It goes into all segments in our communities. That is what we must focus on. When we do that, we will understand that we will meet the needs of the population that we are targeting.

Chairwoman SCHROEDER. Thank you.

Congressman Bilirakis, do you have some questions?

Mr. BILIRAKIS. Thank you, Madam Chair. I have a half-page statement I would ask be inserted in the record.

Chairwoman SCHROEDER. Without objection.

[Opening statement of Hon. Michael Bilirakis follows:]

OPENING STATEMENT OF HON. MICHAEL BILIRAKIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Madam Chairwoman, thank you for holding this important hearing today to highlight the dangers posed by accidental and intentional fires to our Nation's children.

As you know Madam Chairwoman, more than 35% of all fire and burn injuries and deaths are to children. Many of the fires that caused these deaths and injuries started because young children were playing with matches and lighters. In addition, many of the homes where these fires started were not equipped with a working smoke detector.

These are some of the more disturbing statistics before us today, and I am looking forward to hearing the testimony of the distinguished witnesses who will elaborate on them. I would like to welcome each of you to our committee.

Mr. BILIRAKIS. I apologize for being late. I was upstairs in a hearing on the radon bill for protection against radon poison.

We live in fear in this country. I don't know that there is anything worse than that. We have freedom. We have liberty. And yet we live in fear, in our own homes, of someone breaking into our home late at night. We live in fear of fire. And we cannot walk the streets late at night anymore. It is a terrible thing.

Getting back to Mr. Wall's comments about behavioral conduct and Mr. Spaulding talked about the people problem—I think that people problem applies to practically all of our peers, too, including fire and the others.

I was really taken—I came too late to hear Allison Grant's testimony, but I was really taken with reading it.

I wonder sometimes. It seems to me it would be a very inexpensive process to mandate somehow through Curt's ideas or some other ideas the fire detector type of thing in residential homes and also maybe public housing of some sort, apartments and buildings. Although I guess that is taken care of by building codes.

Mr. MAZZOLI. If you will yield—I have to go downstairs because they are going to take a vote, but I wanted to say, saluting what Allison said, I thought your testimony was eloquent, and you are remarkably poised and certainly a very knowledgeable young woman. We are very proud to have you from my hometown.

I think the reason the gentleman asked the question—we talked about education, how it works. Russell possesses three degrees, two Master's Degrees. It is a big part of his work as the chief of the fire division. Allison is currently in school being educated and educating. I think the committee could benefit from both their views on how the education process works, whether people seem to be willing to learn and listen.

Do you find the people at home, for example, Chief, to be receptive to the ideas that you bring to them about fire safety, about fire prevention?

I have to leave, unfortunately, but I am really very proud to represent both of you. You do an excellent job here.

Ms. GRANT. I have found that my peers in my school are very responsive when the fire department comes in and they show us their gear and tell us the eight learning objectives: Stop, drop and roll; cool burns with cool water——

Mr. BILIRAKIS. How about the people you visited? How receptive were they to your classmates, to you, knocking on their door and telling them what to do?

Ms. GRANT. Some of them were shocked. You know, we are young people, and we are educating them. They are just amazed that there is so much that they don't know. It makes us feel really good that they are responsive and receptive to that.

Mr. BILIRAKIS. But they did invite you into their homes and they did, in fact, listen? Did you all actually install fire detectors?

Ms. GRANT. Yes, we did.

Mr. BILIRAKIS. You didn't run into any opposition to speak of?

Ms. GRANT. The majority of the people were very receptive.

Mr. BILIRAKIS. We get again to the role of government and what the role of government ought to be. I have always thought that maybe with the exception of the common defense aspects in our Constitution, that our role ought to be principally motivating, educating, that sort of thing, and that people can probably do for themselves to a very large degree.

But you have the expense of fire detectors, the expense of installing them and that sort of thing, and I think the gornment can probably be very helpful as far as that goes. I don't think I would be adverse to some sort of mandating, if you will, because we are probably talking about a very inexpensive piece of apparatus.

Ms. FEELY. Five dollars.

Mr. BILIRAKIS. I have one in my home, but I think it was there when I moved in.

More than anything else it is an educational thing. Mr. Wall is correct.

Of course, you are only talking about 50 percent of deaths that would be saved if fire detectors prevented fires. Then sprinklers are concerned and also the other things.

I remember a few years ago—I must have been maybe at a Rotary meeting, before I came to Congress. I saw a film. There was a TV set on and a guy lounging watching a ball game and whatever. Then he shut it off and went to bed. Sometime after that, the thing caught on fire. I always remembered that. I don't do much TV watching in this job, but at times, when I shut that thing off and go to bed, I often think about that. That was years ago, too. So you are talking about the fear kind of thing, again. I am not sure what we can do.

Colonel Sanders—that is a great name by the way—you are just waiting to speak up. I would ask you to do that in a moment, sir.

I want to really compliment Allison and all your fellow students. Is this a program—and you do a lot of things in a community, not just this—but is this taking place by other student groups around the country, as far as you know?

Ms. GRANT. I think it should take place.

Mr. BILIRAKIS. Do you think it is?

Ms. Feely, are you familiar with it, with the SAFE KIDS Campaign?

Ms. FEELY. The type of program that Allison's group is doing I think would be terrific to emulate around the country. To get teenagers involved in their community in that way, to have them inter-

acting with other citizens in the community is terrific. You really have an impact.

Mr. BILIRAKIS. I am sure they educate their parents and grandparents and family. What a great way to go. It is certainly smoke detectors. Your program probably went above and beyond smoke detectors. Did you learn from Colonel Sanders and his people the other causes of fire and maybe also educate some of the people in that regard?

Ms. GRANT. Yes, we did.

Also, going back to Mr. Wall's point, he was saying smoke detectors were only 50 percent and that the other part was people. Once they get the smoke detector, they are actually thinking about other things. That is all the more reason to have the smoke detector in your home because every time you walk past the smoke detector you think, "Are we really safe from this fire?" You try to think of ways you can be more safe.

Mr. BILIRAKIS. That is a mature philosophy from a child, so to speak.

Colonel?

Chief SANDERS. You are exactly right. Education is the answer. We found that out the hard way.

We went door to door, to every home in the City of Louisville, giving out smoke detectors. On July 4, 1988, we responded to a fire and had to carry six dead children from the fire. The smoke detector was in the home we gave them, sitting on the mantle.

Next, the deaths that got Allison and her group involved were on January 6, 1989. Three children died in the fire. There was a smoke detector that we provided but the battery had been removed.

So our experience was showing that 100 percent of the time the smoke detector did not work without education, educating the people to the importance of installing and maintaining the smoke detector.

We have now changed our program. We will not give a smoke detector to a person unless they allow us to install it properly. We also go back to every home in Louisville each year to put a fresh battery in that smoke detector. We are only doing this however, because we are failing in our education efforts. If we properly educated the people we would not need to go back and install fresh batteries—but we know we have not reached that point yet.

I would like to comment on the insurance industry. That is a loss-driven industry. If there is any industry in the entire United States that has been slower in moving from a reactive form of doing business to a preventive way of doing business it is the insurance industry. We in the fire service have not educated the insurance industry, the legislators and public and private sector leaders in the fire service like the MADD mothers have in the drunk driving issue.

In the insurance industry, we are looking at a retrofit bill for sprinkler systems in Louisville. Two insurance companies actually increased the rates of insurance if the owner installed a sprinkler system. That is ignorance due to a lack of education. We are responsible for providing that education.

Education is the key. If we were successful in our educational efforts, we would not have to go and buy smoke detectors and put them in. They would be a priority for every family in this country.

Ms. FEELY. I don't want to seem cynical, but I want to add some reality here. One of the things the public health community has learned is that changing behavior is very, very difficult; that when a new form of prevention is introduced—for example, let's take the children's safety seat—there was a tremendous amount of education throughout the country to encourage people to buy and use them.

No matter how much education occurred, only about 17 percent of the population was motivated to buy them and use them. It did not matter. Year after year, it simply did not change.

Then when legislation was introduced, that number doubled, tripled and quadrupled. When enforcement is in place, the number rises yet again. That tells us something about human nature, perhaps, about American behavior.

But the fact was that no matter how much education was done, use did not increase.

One anecdote: About a year ago, we were conducting a focus group with a number of parents of low-income families; it was all about using child safety seats.

We were trying to figure out what sort of messages to use to get parents to use their child safety seats, because the numbers have dropped off again. And through the course of a focus group you get a tremendous amount of information that is communicated.

People were actually amazed that nine out of ten child safety seats were misused, et cetera. Nine out of ten confided they did have children, but they did not have safety seats for them.

At the end of the session, we offered them either a brand new child's safety seat, which costs $50 to $80, or they could get $30, which they had been promised for participating in the focus group. Bar none, every person chose the money rather than taking the child safety seat.

Mr. BILIRAKIS. The bottom line is you feel there have to be some mandates.

Ms. FEELY. Yes, unfortunately, that is the case.

Ms. GRANT. Sometimes people need something to push them along.

Mr. BILIRAKIS. Coming again from the mouth of a child.

Mr. Chairman, I guess we could spend a lot of time on this. I am sure we are just as guilty as anybody else. I know every once in a while there is a little bit of smoke that comes from the kitchen stove and there goes our fire detector.

There are times I wish I did not have it. I would like to grab it and throw it out. But that is certainly not the way.

Thank you very much.

You are wonderful to come here. Hopefully, with the help of the NFPA, this can be a start toward educating the American people.

Ms. FEELY. Thank you for taking an interest.

Mr. MARTINEZ [presiding]. Thank you, Mr. Bilirakis.

I will give you a more graphic example of what you say: A lot of people want to decide their own fate and whether they want to par-

take in some safety feature. I was at Houston, Texas, not long ago, at a golf course, and was calling a taxi to take me home.

There was a gentlemen in the club room there, and he said, "Where are you staying?" I told him. He said, "I have to go right by there." He said, "Don't call a cab. I will drive you over." I thought that was very nice of him. So I went with him.

As I started to get in his car and reached for the safety belt, I saw they were welded shut. He said, "If you have to wear a safety belt, you don't want to ride in my car."

He said, "The government is not going to get in my car, or in my house and tell me what I have to do, or don't do."

There is a whole segment of people out there who don't want to pass a law requiring people to do anything because somehow that is an invasion of their privacy, and it is an interference with their God-given right to decide whether or not to be safe.

We have had to overcome that with the drunk driving laws, and other things.

I understand what you are saying about offering the $30 or the seat, which was much more expensive, and they took the $30.

Ms. FEELY. I think that the sensibility about intrusion of your personal rights exists. Unfortunately, when you go out and get into a car crash and you don't have insurance, I end up paying for it. Or even if you do have insurance, I may pay. You have to weigh the common good versus your personal rights.

In the case of children, I totally disagree. I feel like I have the right to invade your privacy there.

Mr. MARTINEZ. They are the same people who are very vehement about saving one form of life, but they don't care very much about the quality of life for that child after that child is born to the point of requiring laws that make themselves even from—and I hate saying this, sometimes, not all the time, maybe a minimum of time—from the callousness of their own parents and the uncaring—I don't know if it is uncaring, that is wrong.

Ms. FEELY. Irresponsibility.

Mr. MARTINEZ. That is right.

Mr. Holloway?

Mr. HOLLOWAY. I will be very brief. I know we have a vote.

I want to thank Mr. Weldon for his work in this field ever since he has been a Member of Congress. I think he came in and he saw a void here and has very ably filled that void in Congress by creating the Fire Caucus and many of the other things that he has done here to work toward it.

Just to follow up on what has been said, we can go on forever with that, we can get into AIDS and other things, where we refuse to let people know who is a carrier.

We don't want to touch that need, because that would be a four-day hearing. I think we do have some needs here.

I think education is absolutely necessary. My fear is always of being in buildings with many floors. I stayed in a building with a 25th floor this past weekend. I don't know why that gives me the jitters.

It is the only thing I ever think about when I go to sleep at night. If I worried about the TVs, I might never sleep.

I would like to ask the question: Do we have any figures that show children being left unattended at a young age, especially is there a percentage or any data that shows how many of them are casualties of fires? And with adults, how much is caused by high levels?

I live in a single home, with one floor. I train my kids to break the window and go out. How many deaths are caused in these tall buildings?

Mr. WALL. It is something less than 6,000 people a year that die in all fires. About 3,800 die in fires in one-family houses, so you are at greater risk at home.

I share with you, I don't like to go above the sixth floor. I think we feel we have control over our home and not over a hotel, because there are strangers in it. The Hotel Safety Act will protect people in hotels; it caused them to put sprinkler systems in. Otherwise Federal travelers don't get their per diem.

It is like the idea of the carrot and stick. We are saying to our employees, "If you are quartered in a hotel without a sprinkler and there is a sprinklered hotel at the same rate, you will not get reimbursed." I know that will work.

The one-family house problem is a severe problem. That is where our people are dying. The statistics show that children under five run two times the risk of death that adults do.

It shows you there is no help getting the child out, or the child is alone. It is not a good picture.

Chief SANDERS. Those who lived through the MGM Grand fire, the Las Vegas Hilton, I am sure share that concern of yours when they are in high-rise buildings.

Mr. SPAULDING. I think you pointed out something interesting when you mentioned the fact about how you felt in your personal home. Normally, people tend to feel comfortable where they reside and they let down their guard more than they should, as far as looking at the safety features that are there, or should be there.

Sometimes they do that with their own children. Because they have them with them at all times, they tend to get complacent with a lot of things that they should be doing, as to what is happening, in fact, with them.

The other problem, I think, as you look at what America does, I think we send out a confusing message as to what we really mean. As you look at life, on one hand, we say life is extremely valuable and high.

On the other hand, we do things that are very detrimental to life itself. It is a confusing message.

Children have innocent minds and they look at what adults do. We don't think about what we have communicated to our youth.

I would submit that the major problem our youth are dealing with is trying to figure out what we adults are saying. We want to articulate something and give some rules, but we are not willing to live and be an example of those.

Even in the safety area, we can tell the child not to do certain things, but when they watch us, how do we handle fire? How do we handle the environment in which we have our children? What are we nonverbally communicating to them in our behavior?

I think that is important to look at when we deal with this whole area.

Mr. BRACE. If we look at fire deaths in the last 10 years, they have been reduced in half or close to that. The smoke detector has been attributed as being responsible in major part for that reduction in fire deaths.

Education is a piece of it. Enforcement, some of us believe, is an additional piece of it. There is no one, simple solution—residential sprinkler systems, with the proper alarm system, et cetera.

But I think all that is being said about smoke detectors is that we can continue to reduce fire deaths incrementally. I mean there are some people who, regretfully, are going to perish in a fire, regardless of what we do.

But I think we are a long way from saying that we still cannot save more people. I think that is the essence of at least some of the arguments that are being presented.

How do we do it? It can be done through enthusiastic enforcement, education, creation, or whatever other imaginative thing you can think of. All I can say about groups across the country that feel fire prevention is important is that I believe the future is coalitions.

You have some examples right here at this table. SAFE KIDS are marvelous builders of coalitions of people. It is not a problem unique to the fire service or just a school problem. Also, we see the Kiwanis, Rotaries, Lions, other fraternal groups, Boy Scouts and Girl Scouts joining together in coalitions for smoke detector distribution, public education, et cetera.

I think we can still lower that death rate. It doesn't always take a lot of money, but it takes things like camera-ready artwork that can go into local newspapers. With that kind of public education support, people begin to come forth and say, "How can we participate in it?"

Mr. HOLLOWAY. I don't have any further questions.

Mr. MARTINEZ. Mr. Weldon?

Mr. WELDON. Mr. Martinez, I would like to submit information about the facts at hand, for the record.

Mr. MARTINEZ. Without objection.

[The information follows:]

ONE HUNDRED SECOND CONGRESS
PATRICIA SCHROEDER, COLORADO
CHAIRWOMAN
GEORGE MILLER, CALIFORNIA
WILLIAM LEHMAN, FLORIDA
MATTHEW F. MCHUGH, NEW YORK
TED WEISS, NEW YORK
BERN, ANTHONY JR., ARKANSAS
BARBARA BOXER, CALIFORNIA
SANDER M. LEVIN, MICHIGAN
J. ROY ROWLAND, GEORGIA
GERRY SIKORSKI, MINNESOTA
ALAN WHEAT, MISSOURI
MATTHEW G. MARTINEZ, CALIFORNIA
LANE EVANS, ILLINOIS
RICHARD J. DURBIN, ILLINOIS
DAVID E. SKAGGS, COLORADO
BILL SARPALIUS, TEXAS
TIM JOHNSON, SOUTH DAKOTA
DARLENE HOOLEY, OREGON
JOSEF KELLY PETER, MISSOURI
JIM BACCHUS, FLORIDA
DOUGLAS "PETE" PETERSON, FLORIDA
ROBERT E. "BUD" CRAMER, JR., ALABAMA

GARDENIA FERRIGNO
STAFF DIRECTOR

JILL G. SHARP
DEPUTY STAFF DIRECTOR

TELEPHONE: 202 225-7303

U.S. House of Representatives

SELECT COMMITTEE ON
CHILDREN, YOUTH, AND FAMILIES
385 HOUSE OFFICE BUILDING ANNEX 2
WASHINGTON, DC 20515-6401

FRANK G. WOLF, VIRGINIA
RANKING REPUBLICAN MEMBER
J. DENNIS HASTERT, ILLINOIS
CLYDE C. HOLLOWAY, LOUISIANA
CLINT GOLDEN, PENNSYLVANIA
LAMAR S. SMITH, TEXAS
JAMES T. WALSH, NEW YORK
RONALD K. MACHTLEY, RHODE ISLAND
BOB SCHAFFER, OHIO
NATHAN DEAL, GEORGIA
FLORIDA
SCOTT L. KLUG, WISCONSIN
RICHARD JOHN SANTORUM, PENNSYLVANIA
DAVE CAMP, MICHIGAN
FRANK D. RIGGS, CALIFORNIA
BILL BARRETT, NEBRASKA

DANIELLA MARRERO
REPUBLICAN STAFF DIRECTOR

CAROL G. STUFFLEBY
REPUBLICAN DEPUTY STAFF DIRECTOR

TELEPHONE: 202 225-7303

REPUBLICAN FACT SHEET

HEARING

"FIRE SAFETY: PROTECTING O"R CHILDREN AND FAMILIES"

Tuesday, August 11, 1992
2237 Rayburn House Office Building, Washington, DC

I. STATISTICS ON FIRES AND CHILDREN:

A. General Death and Injury Rates

* Fires kill an average of 5,500 people each year. [1]

* There are more than two million burn injuries in the United States each year. An estimated 60,000 of these injuries require hospitalization, almost half of them in specialized burn centers. [2]

* Preschool children (age 5 and under) and older adults have the highest fire death rates in U.S. home fires. [3]

* The risk of fire-related death is approximately two times as high for African-Americans than it is any other group. [4]

* More than 35% of all fire and burn injuries and deaths are to children. [5]

* Fires and burns are the second leading cause of accidental death for children one to four years old and the third leading cause of death for all those under age 19. [6]

* Seventy-five to 80 percent of burn injuries occur in and around the home. [7]

* An estimated 60 percent of children who are hospitalized for burns are burned by hot liquids. [8]

* For preschool children, four out of 10 fatalities occurred during the daytime hours of 8 a.m. to 4 p.m. [9]

BEST COPY AVAILABLE

* The direct costs for treating fire/burn injuries is over $1 billion per year.[10]

* Children from low-income families are perhaps at the greatest risk of death or injury from house fires because they tend to live in high risk environments.[11]

B. Children Playing With Fires: Accidents

* The leading cause of fire deaths for preschool-age children was children-playing fires. One-third of the overall deaths of children are the results of their playing with fire.[12]

* Causal factors were examined separately for children-playing fire victims age 2 or under and those age 3 to 5. The vast majority of victims involved children playing with matches or lighters.[13]

* In 1990 alone, children playing with fire started 98,460 fires. These fires resulted in the following:
  1) an estimated 352 civilian deaths.
  2) an estimated 2,480 civilian injuries, nearly all occurring in home fires.
  3) $223.2 million in direct property damages.[14]

* The death toll due to fireplay by children dropped sharply in 1990 - nearly one-fourth - after a slight upward trend in the 1980's. Fireplay was still the leading cause of fire deaths among preschoolers, however, typically accounting for one-third of such deaths in the late 1980's.[15]

* The fatality rate for males also was 40% higher for children playing with fires than for females. Moreover, male arson arrestees outnumber females by more than six to one.[16]

C. Children Staring Fires: Arson

* Arson arrests increased seven percent in 1990.[17]

* Arson has the highest percentage of juvenile involvement for any FBI crime index.[18]

* Of all arson clearances in 1990, 38 percent of alleged perpetrators were under age 18.[19]

* Nearly 30 percent of all persons arrested for arson in 1990 were under 15 years of age. About 7% of those arrested were under the age of 10. This level of pre-teen involvement is unheard of for any other crime tracked by the FBI.[20]

It is important to note, however, that arson accounts for a very small fraction of the activity of the criminal justice system. Of the eight FBI Index crimes, arson ranked last in number of arrests in 1990.

These figures indicate, nonetheless, how serious the juvenile firesetter problem is. They also show that very youthful offenders are a particular problem in cities and much less so in rural countries.[21]

D. Juvenile Firesetter Profiles:

"Past research shows that approximately 50 percent of the fires set by children are set out of curiosity or ignorance, not malice. **Fireplay** occurs when unsupervised children experiment with matches or other fire-starting materials.

Firesetting: Pathological firesetting, as distinguished from fireplay, is an intentional, nonproductive fire start. The majority of the youths involved in firesetting are males between 7 and 18 years old."[22]

E. Facts on Smoke Detectors:

* Seventy-five percent of homes now have smoke detectors, but only two-thirds of these homes, or 50% of all homes, have at least one detector in proper working order.[23]

* About 30% of all detectors do not work because batteries are dead or have been removed, and another 5% do not work because of a bad electrical connection.[24]

* In 74% of the homes where preschool children fatalities occurred, a smoke detector was not present.[25]

* 55% of all fire fatality victims were asleep -- which further points to the need for working smoke detectors in homes.[26]

II. COMMON CAUSES OF FIRES:

A. Smoking-Material Fires: Smoking-related fires accounted for 5.2 deaths per million population nationwide, or 27% of all fire deaths.[27]

B. Heating Equipment

Another major cause of fatalities was heating equipment, which accounted for 3.0 fire deaths per million or 16% of all fire deaths. The highest risk groups for heating-equipment-related fires were preschool children age 5 and under.[28]

ENDNOTES

1. National Burn Awareness Week Information Kit, 1992, by the National Burn Awareness Task Force for the U.S. and Canada, Encino, CA.

2. Ibid.

3. "Patterns of Fire Casualties in Home fires by Age and Sex, 1985-1989," February 1992, by Michael J. Karter, Jr., Fire Analysis & Research Director, National Fire Protection Association, Quincy, MA.

4. Dr.John Hall, Assistant Vice President for Fire Analysis and Research, National Fire Protection Agency, Quincy, MA.

5. Ibid.

6. National Burn Awareness Task Force, 1992, see footnote 1.

7. Ibid.

8.Ibid.

9."Patterns of Fire Casualties," Karter, see footnote 3.

10.National Burn Awareness Task Force, 1992, see footnote 1.

11.Written Testimony of Herta B. Feely, before the US House of Representatives Subcommittee on Science, September 24, 1991.

12."Children Playing With Fire: U.S. Experience, 1980-1990," June 1992, by Michael J. Karter, Jr., Fire Analysis & Research Director, National Fire Protection Association, Quincy, MA).

13.Ibid.

14.Ibid.

15.Ibid.

16.Ibid.

17."US Arson Trends and Patterns - 1990," by John R, Hall Jr., Fire Analysis and Research Division, National Fire Protection Association, Quincy, MA

18. Ibid.

BEST COPY AVAILABLE

19.Ibid.

20.Ibid.

21.Ibid.

22. US Dept. of Justice, Office of Juvenile Justice and Delinquency Prevention, "A Look at Juvenile Firesetter Programs," Juvenile Justice Bulletin, p. 1, May 1989, by Rebekah K. Hersch.

23.National Burn Awareness Week Task Force, see footnote 1.

24.Ibid.

25."Patterns of Fire Casualties, Karter, see footnote 3.

26.Ibid.

27.Ibid.

28.Ibid.

Mr. MARTINEZ. The record will remain open for two weeks to allow committee Members and witnesses to submit written materials for the record.

Mr. WELDON. I would like to thank you, and once again the Chairwoman, and our Ranking Member for the cooperation and all the witnesses for coming in today.

Mr. MARTINEZ. What we have heard loud and clear is that children are losing lives each year because of fires, many not having a way to control that situation because they are in environments beyond that control.

One of the things we can look at is that the Federal Government in one way or another subsidizes the bulk of that funding that goes for housing for the poorest of poor in this country.

The testimony today, especially from Ms. Feely, is that is where the problem is, in the poor community. If you look at where the government spends the bulk of our resources, public housing, foster care, that is all Federal money going in. So, perhaps, there is a way to use the carrot and stick approach to provide education.

Mr. MARTINEZ. I would like to associate my remarks with those Mr. Weldon has just made.

Mr. Bilirakis, do you have another question?

Mr. BILIRAKIS. Mr. Chairman, just very quickly, because I think one of the things we have really established here and we have talked about the help that smoke detectors might be, but one of the fundamental things we have established is that it is a people problem.

I keep going back to Mr. Spaulding's comments.

Mr. Wall, FEMA keeps statistics and they go back quite a ways?

Mr. WALL. Yes, sir.

Mr. BILIRAKIS. Do you have statistics which are relative, which can compare 30 or 40 years ago with today, taking into consideration, of course, the increase in population?

I guess I am getting maybe to standards, behavioral patterns, what has happened to society, two-parent working families, which generally means the young children are left alone a lot more, or whatever the case may be there.

Mr. WALL. Our database only goes back to the mid-1970s. The Fire Administration was created by Congress in 1973.

Prior to that, the statistics that were kept were done on an annual survey, primarily by NFPA. That is why you will see figures published that in 1973, there were over 12,500 people who died in fires.

Then the first year that we were collecting statistics, we recognized that there was an aberration in that figure, that there was double reporting, and actually the fire deaths were about 9,700; so accurate records started in the mid- to late 1970s.

We cannot do some of the fine tuning that you want, because we rely on the information fed through the State fire marshal and by the local fire service. Sometimes it is difficult to refine it down to the point where the children were unattended, or what have you.

That may be included in the narrative report that Mr. Brace, for example, would get into.

We are working with the National Association of State Fire Marshals. I believe we can bring to you some statistics for the record that would be very interesting.

Mr. BILIRAKIS. Mr. Wall, without requiring too much of an undue effort on your part, if you have anything of that nature, we would appreciate it for the record.

Mr. WALL. We will try to provide something.

[The information follows:]

Federal Emergency Management Agency
United States Fire Administration
Emmitsburg, Maryland 21727

FIRE IN THE UNITED STATES
An Information Backgrounder from the U.S. Fire Administration

Revised July 1992

FACT: The U.S. has one of the highest fire death rates, per capita, in the world. U.S. fire deaths per million population are almost twice the average fire death rates for other industrialized countries.

FACT: Each year, fires kill more Americans than all other natural emergencies combined, including floods, hurricanes, tornadoes and earthquakes.

FACT: Fire is the third leading cause of accidental death in the home. At least 75% of all fire tragedies occur in residences. Direct property loss is estimated at $10.4 billion.

FACT: The total cost of fires to the American public is $50 billion annually. This figure includes the cost of protection, fire department costs, and insurance overhead.

Annual National Fire Deaths, Injuries and Property Damage

Some 5,800 people die in fires each year; an additional 30,000 civilians are injured. More than 2 million fires are reported to fire departments each year, with approximately 20 million more fires unreported, many of which cause additional personal injuries and considerable property loss. More than 100 firefighters die each year in the line of duty. Fires can also cause emotional disturbances and destroy irreplaceable heirlooms and mementos.

The Cost of Fires in the U.S.

The cost of fire -- losses plus the cost of protection, fire departments and insurance overhead -- is more than $50 billion per year. This does not include the value of labor donated by over one million volunteer firefighters. Direct property loss in a typical year is $10.4 billion. This does not include the business interruptions, lost tax revenues, and loss of employement.

FIRE AND SPECIFIC POPULATIONS

Age Differences

Senior citizens are at the highest risk -- more than double that of the rest of the population. They sense fire less easily, move less quickly and are more easily killed by asphyxiation. Children under age 5 double the risk of being killed in a fire than teenagers and adults -- 50-100% higher than the average population. Of the estimated 5,800 people that die in fires each year, approximately 1,300 of these fire deaths are children under the age of five. About 25% of the fires that kill young children are started by children themselves playing with matches and lighters. These children are usually about three years old. 12,000 fire-related injuries affect children under the age of 15.

Sex Differences

Fire deaths and injuries for men are nearly double that of women, even excluding firefighter deaths.

BEST COPY AVAILABLE

60-327 O - 93 - 5

Ethnic and Racial Differences

On the average, the fire death rate for African Americans is almost double that of the rest of the population. American Indians have an even higher fire death rate than African Americans. Oriental Americans have a much lower rate; one-third that of Caucasian. Differences in fire death rates among groups may be due to differences in family income, education levels, family stability, alcoholism, and other social practices.

FIRE SITES

Geographic Considerations

The southeastern United States has the highest fire death rate per capita. Older cities in the northeast and north central regions have higher fire death rates than cities west of the Mississippi River, especially those in the southwest. People living in urban and rural areas have a much higher risk of dying in a fire than those in suburban areas and small towns. Communities under 5,000 in population are at highest risk -- residents of rural Illinois have a higher risk of fire death than residents of New York City. Careless use of fixed room heaters and portable space heaters is the leading cause of fire deaths in the South and other largely rural areas nationwide. In large cities, cooking and arson fires predominate.

Single-Family Residences

In a typical year, at least 3,800 people die in single-family residential fires. Approximately 65% of all residential fire tragedies occur in single-family homes and duplexes, not high-rises or other apartment complexes. Over $5 billion of annual property loss is in residences. Indirect monetary losses from home fires -- temporary shelter, meals, missed work, legal, medical and funeral expenses, etc., -- probably total nearly $1,000,000,000 annually. Careless smoking is the leading cause of residential fire deaths, heating is the second leading cause. Both are trending downward.

Apartments

At least 785 fire deaths occur in apartments each year and 20% of all structural fires are in apartments -- 60,000 in a typical year. Over $500 million is lost annually in apartment fires. Careless cooking is leading cause of apartment fires; arson is the second major cause. Heating fires are much less prevalent in apartments.

Hotels and Motels

About 80 people die in hotel/motel fires annually. The leading cause of these fires is careless smoking -- usually associated with alcohol consumption. Because of the liability problem, legislative initiatives and national media coverage of past major hotel fires, such as Las Vegas and Puerto Rico, have served to increase the level of fire safety information provided to hotel guests. Smoke detectors, sprinkler systems, exit planning, and staff training by hotel operators have also increased.

Non-Residential Fires

Non-residential building fires account for 43% the annual fire dollar loss. Arson is the biggest cause of dollar loss, deaths, and injuries in commercial properties overall, with cooking fires the major cause of fire in restaurants and bars. Faulty electrical distribution is the leading fire cause in offices and stores.

BEST COPY AVAILABLE

CAUSES OF FIRES

Arson Fires

Arson is the third largest cause of both residential fires and residential fire deaths. Arson causes approximately one-fifth of the dollar loss from all structural fires. About 75% of all residential arson fires are in one and two-family homes, rather than in apartment buildings.

Heating-Related Fires

Heating, the leading cause of residential fires, is on the downswing. The fire service nationwide responds to over 100,000 heating fires each year. Heating fires cause the second greatest amount of dollar loss. In the southeastern United States, heater fires are the leading cause of fire deaths. Woodstoves are also a problem, particularly the northern tier of the Nation.

Cooking-Related Fires

Cooking is the second most frequent cause of single-family residential fires and the leading cause of apartment fires. Cooking fires frequently cause fire injuries that are never reported. Cooking fires more often result from unattended cooking and human error rather than from the mechanical failure of stoves or ovens.

Careless Smoking

Careless smoking fires are declining but are still the leading cause of fire deaths. An intoxicated male smoker falling asleep in an upholstered chair is the most common scenario. Since smoking fires commonly smolder, smoke detectors, and smolder-resistant bedding and upholstered furniture are significant deterrents.

FIRE DETECTION AND SUPPRESSION EFFORTS

Smoke Detectors

The United States Fire Administration statistics show that a working smoke detector doubles a person's chance of surviving a fire. To date, 29 states have enacted some form of legislation mandating smoke detectors in new residential dwellings. Approximately 82% of the United States households are equipped with at least one smoke detector. The 18 percent with no smoke detectors are where 64 percent of residential fire deaths occur.

Residential Sprinklers

Fire protection studies have estimated that between 75% and 90% of all residential fire fatalities could be avoided if residential sprinklers are used in conjunction with working smoke detectors. Sprinklers are a sound investment -- they increase property value and can lower insurance premiums. New technologies allow sprinklers to be connected directly to standard home plumbing systems. Sprinkler heads are activated individually where the fire strikes, localizing property damage and minimizing fire-related injuries.

FIREFIGHTER TRAINING

Firefighter Training

Most training of firefighters is carried out at the local level, with many differences among State, local and Federal training academies. Fire academies

BEST COPY AVAILABLE

offer ongoing hands-on training. Many fire departments hold practice drills and offer "in-service" training (classroom style) for every shift. The National Fire Academy, part of the U.S. Fire Administration, offers advanced courses for continuing education of the firefighter and fire executive officer.

SUMMARY

We know more about this Nation's fire problem than ever before because of the USFA's National Fire Incident Reporting System and analyses of major fires. As a whole, the general public is still unaware of the Nation's fire problem, its causes and the safety behaviors that can prevent needless tragedy. Until this is remedied, America is likely to continue to have the world's worst fire problems. For more information on the United States fire problem, please contact:

U.S. Fire Administration
16825 South Seton Avenue
Emmitsburg, MD 21727
Phone: (301) 447-1272

["Resources on Fire", a publications catalog of the United States Fire Administration, FA-102, March 1991, is retained in committee files.]

Federal Emergency Management Agency
United States Fire Administration
Emmitsburg, Maryland 21727

Latch Key Kids

August 24, 1992

The Department of Census data for 1988 under Household Economic Studies is one of the few sources of reliable survey data on numbers of Latch Key Kids in the United States.

According to census, 1.4 million children, ages 5 to 14, care for themselves during the hours when they are not in school.

Federal Emergency Management Agency
United States Fire Administration
Emmitsburg, Maryland 21727

Heat Detectors vs. Smoke Detectors

August 24, 1992

U.S. Fire Administration asked the National Institutes of Standards and Technology (NIST) to research any completed studies on the issue of smoke detector/heat detector performance. Ten independent studies, conducted in four countries over a 20-year period, were reviewed, particularly the performance of heat and smoke detectors in providing life safety of the occupants in residential fires. All the tests were real scale tests in houses and apartments and most used actual household items as the fire sources.

All of the studies reached essentially the same conclusions. Either of the ionization or photoelectric smoke detectors, when located outside bedrooms and on each level of a house, provides adequate warning to allow occupants to evacuate through their normal egress routes for most residential fire scenarios. The second general conclusion reached by these studies is that heat detectors, even when located in the room of fire, do not provide adequate warning in most fire scenarios.

Federal Trade Commissions Action

In 1983, the Federal Trade Commission (FTC) was petitioned to review Figgies International, Inc. (Vanguard heat detectors) claims about the performance of its heat detectors. The Commission ruled in 1987 that Figgies claims that Vanguard heat detectors respond more quickly than smoke detectors to hot, flaming fires were false. This past July, Figgies International agreed to pay a civil penalty to settle the FTC charges that Figgies violated the 1987 FTC order prohibiting it from making misrepresentations about the performance of heat detectors and smoke detectors.

According to an FTC fact sheet for consumers, heat detectors respond more slowly than smoke detectors and therefore, provide less warning time for escape from a home fire.

Mr. BILIRAKIS. Thank you, Mr. Chairman.

Mr. MARTINEZ. If you have this information, I would like you to supply it for the committee: the average cost of a battery-operated smoke detector and the average cost of a hard-wire detector, to compare the differences, and then the cost of a sprinkler system for the average home.

Mr. WALL. We can submit those. We have done studies on eight cities for a sprinkler system recently. I will be happy to submit it for the record.

[The information follows:]

Sprinkler Systems Costs
by Occupancy Type

1. Office Buildings - New Construction

- Estimated cost (League of California Cities) of Sprinkler Systems $1.00 - $2.50 sq. ft.
  (Piping, heads, pumps and labor)

- Difficult to get actual costs in new construction since most builders don't separate sprinkler systems cost nor do they calculate their construction costs by square foot. It is usually calculated as a percentage of total costs for sprinkler systems 1% or 2%

- Labor costs vary greatly across U.S. and impact final square foot cost considerably
  EG: $48 California
  $22 Southern Region of U.S.

- Most sprinkler contractors quote the sprinkler systems cost listed in Building Valuation Data Reports of Model Building Codes

  BOCA $1.75 sq. ft.
  ICBO $1.50 sq. ft.
  SBCC $1.30 sq. ft.

- John Best, Montgomery County Fire Marshal says that average costs for sprinkler systems in new residential construction has been $1.31 sq.ft.

Sprinkler Systems Costs

2. <u>Office Building</u> - Retrofit

- Based on actual retrofit experience by sprinkler industry, retrofits are estimated to cost between $1.50 -$4.00 per sq. ft.
  $1.50 - $4.00
  - Some specific averages by location and number of properties

California (6)	Chicago (5)	Pittsburgh (2)
$3.89	$1.96	$2.25

- There are many variables that impact the costs of retrofit. No two conditions are alike. Some of the factors would include:
  - Height of building
  - Ability to use existing standpipe and fire pump system
  - Access to ceilings and walls
  - Hours that work can be conducted on site
  - Incentives and construction alternatives
  - Deadlines for retrofit (e.g., 6 months or 2 years)
  - Compartmented vs. open landscape space

- The California retrofits costs were extracted from total retrofit costs which included asbestos abatement, architectural and engineering, emergency generators and other related construction costs. (see LA Report)

- The average figures cited above tend to support the industry estimates that retrofit costs about <u>50%</u> more than sprinkler systems installed during original construction.

Sprinkler Systems Costs
by Occupancy Type

3. Public Housing/Apartments HUD Assisted

- The USFA, the Department of Housing and Urban Development, and the National Association of Homebuilders/Research Center completed sprinkler retrofits in HUD-assisted, multi-family and single-family structures.

  - The multi-family buildings ranged from a 22 unit, three-story building in Boston to two-family duplexes in Austin, Texas.

  - The cost per square foot for the entire sprinkler systems ranged from a low of $1.51 per sq. ft. in Prince George's County, Maryland to $3.80 per sq. ft. in Austin, Texas. Average was $2.23.
    $1.51 - $3.80 per sq. ft.

- A major factor of costs were in the water supply charges. For example, Prince George's County, Maryland does not charge for water for firefighting; whereas, Austin, Texas charged more than 50% of the total systems costs for water services or $1.30 per sq. ft.

- Sprinkler design costs varied among jurisdictions from a low of $.10 per sq. ft. in Boston, Massachusetts to $.85 per sq. ft. in Austin, Texas.

- Insurance discounts following retrofit range from a low of 5% in Prince George's County to 50% in Seattle, Washington.

Sprinkler Systems Costs
by Occupancy Type

4. Public Assisted - Single-family

- The singe-family residences range from a cost of $1.42 in Quincy, Florida to a high of $3.72 per sq. ft. in Seattle, Washington. The average cost for old residences was $3.17 per sq. ft. $1.42 - $3.72 per sq. ft.

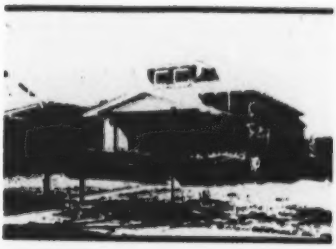
- Seattle's cost were high due to architectural constraints of an older structure. For example, the systems's piping could not be concealed without major additional expenses.

- Economies of scale, could not be as easily achieved in the single-family buildings. Materials for multi-family were $.83 per sq. ft. versus $.92 per sq. ft. in single-family buildings. Labor costs were averaged $1.07 per sq. ft. in multi-family as opposed to $1.51 per sq. ft. for the single-family.

COMMUNITY: Denver, Colorado

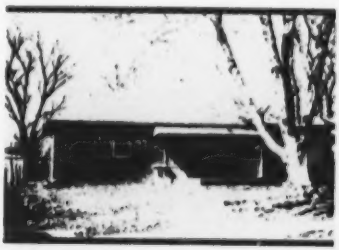
CONTACT: Susan Spinell
Planning and Community
Development Office
200 West 14th Avenue
Denver, CO 80204
(303) 575-5733

Tom McManus
Denver Department of Fire
Fire Prevention Bureau
745 N. Colfax Avenue
Denver, CO 80204
(303) 575-5522



BUILDING LOCATIONS: 3145 Gaylord Street
3713 Gaylord Street
Denver, CO

BUILDING OWNER: Owner occupied homes



BUILDING DESCRIPTION: Woodframe, single-family 1 story detached house with basement

SPRINKLER SYSTEM: NFPA 13D

SYSTEM DESIGN & INSTALLATION CONTRACTOR: AAA Fire Sprinkler, Inc.
355 East 55th Avenue
Denver, CO 80216
Contact: Pete Froyen
(303) 293-9202

3145 GAYLORD STREET, DENVER

COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$ 0	$ 216	$ 216
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$1,610	$4,592	$6,202
Indirect Costs	$	$ 132	$ 132
Other Fees	$	$ 805	$ 805
TOTAL	**$1,610**	**$6,745**	**$7,355**
Cost Per Sq. Ft.			$ 5.47

3713 GAYLORD STREET, DENVER

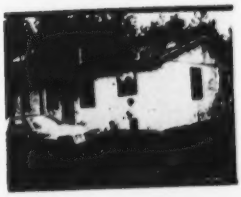
COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$ 0	$ 216	$ 216
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$1,548	$4,368	$5,916
Indirect Costs		$ 132	$ 132
Other Fees			$ 678
TOTAL	**$1,548**	**$4,716**	**$6,943**
Cost Per Sq. Ft.			$ 8.00

BEST COPY AVAILABLE

COMMUNITY: State of Florida

CONTACT: Rick Ruh
Division of State Fire Marshall
Bureau of Fire Prevention
Plans Review Section
J. Edwin Larson Building
Suite 591
Tallahassee, FL 32399-0300
(904)488-2449



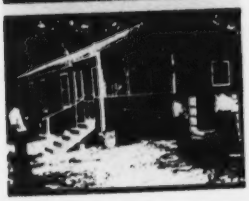
BUILDING LOCATION: Cities of Quincy, Tampa, St. Petersburg, Orange Park, and Jefferson County (Seven Buildings, Total)

BUILDING OWNER: Owner occupied homes

BUILDING DESCRIPTION: All single-family, detached homes, wood frame; six 1-story, one 2-story;

SPRINKLER SYSTEM: All NFPA-13D;
Including one well-water system

SYSTEM DESIGN & INSTALLATION: Members of Florida Fire Sprinkler Association
Headquarters
Tampa, Florida
Contact: Mr. Chuck Dunn
(813) 932-7811



BEST COPY AVAILABLE

1448 MILLER STREET, ORANGE PARK

COST BREAKDOWN

	Materials	Labor	Total
System Design	$ 0	$ 275	$ 275
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$ 938	$ 546	$1,489
Permits	$ 50		$ 50
Plan Review and Inspection	$ 50		$ 50
Water Dept. Fees	$ 25		$ 25
TOTAL	$1,081	$ 821	$1,889
Donated Sprinkler Heads			$ 135
Cost to Contractor			$1,747
Cost per square foot (without donation)			$ 1.01
Cost per square foot (with donation)			$ 1.40

Source: Florida Fire Sprinkler Association (FFSA)

1403 FLOYD CIRCLE, ORANGE PARK

COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$ 0	$ 123	$ 123
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$648	$1,270	$1,848
Indirect costs		$ 116	$ 116
Plans Review and Inspections	$ 93		$ 93
TOTAL	$658	$1,519	$3,177
Cost per Square Foot	$ .58	$1.33	$1.91

Source: FFSA

619 SEVENTH AVENUE, QUINCY

COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$ 0	$ 275	$ 275
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$495	$ 990	$1,455
TOTAL	$495	$1,265	$1,730
Cost per Square Foot	$.41	$ 1.01	$ 1.42

4437 16TH AVENUE SOUTH, ST. PETERSBURG

COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$ 0	$ 168	$ 168
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$1,053	$ 496	$1,549
Electrical		$ 210	$ 210
Permits	$ 39		$ 39
Plans Review/Inspection	$	$	$ 35
TOTAL	$1,092	$ 874	$2,001
Cost per square foot	$ 1.04	$ .83	$ 1.90

Source: FFSA

1040 11TH STREET SOUTH, ST. PETERSBURG

COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$0	$496	496
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$732	$890	$1,622
Electrical	$0	$162	162
Permits	$440	$79	$1
Plans Review/Inspection	$0	$54	54
Water Dept.	$ 500	$199	$19
TOTAL	$1,2096	$1,8482	$4,004
Cost per square foot	$.919	$1.91	

Source: FFSA

JEFFERSON COUNTY

COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$ 0	$ 200	$ 200
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$919	$1,114	$2,033
Indirect Costs	$ 25	$ 34	$ 59
TOTAL	$944	$1,348	$2,292
Cost per square foot	$ .81	$ 1.15	$ 1.96
Total w/out donation		$4,542	
Cost per square foot		$3.88	

218 NORTH MARKS STREET, TAMPA

COST BREAKDOWN

Category	Materials	Labor	Total
System Design	$0	$430	430
Mechanical (includes pipe, fittings, valves, sprinkler heads, flow switches)	$ 900	$605	$1,505
Electrical	$ 215	215	
Permits	$0	$50	50
Water Dept.	$ 100	$250	$350
TOTAL	$1,275	$1,275	$2,550
Cost per Square Foot	$ .75	$ .75	$ 1.50

Source: FFSA

BEST COPY AVAILABLE

COMMUNITY: Seattle, Washington

CONTACT: Chief Gregory M. Dean
Seattle Fire Department
301 2nd Avenue South
Seattle, WA 98104
(206) 386-1450

Janet W. MacKenzie
Seattle Department
of Community Development
400 Yesler Way
Seattle, WA 98104
(206)684-0350

BUILDING LOCATION: Victoria Apartments
Denny Way &
14th Avenue East
Capitol Hill
Seattle, WA

BLDG. OWNER & DEVELOPER: Mr. Randy Martens
Mr. William Chan

TENANTS: Moderate Income

BUILDING DESCRIPT.: Woodframe, 10 unit, single-family conversion, 4 stories and basement

SPRINKLER SYSTEM: NFPA-13D. All Copper.

DESIGN & INSTALL.: James Buchanan; and
Ms. Audrey Vanhorne
Van Horne & Van Horne Architects
Seattle, WA
(206) 324-1980
Larry Meyers
LNW Fire Protection System
Redmond, WA
206-867-1861

TABLE 3-3
SPRINKLER SYSTEM COSTS

Work Category	Materials	Labor	Total
SYSTEM DESIGN	$ 0	$ 500	$ 500
SYSTEM INSTALLATION:			
Mechanical (Includes pipe, fittings, valves, sprinkler heads, flow switch)	$7,239	$4,826	$12,065
Architectural (Includes sheetrock, framing, carpentry)	$ 200	$ 800	$ 1,000
Electrical	$ 80	$ 200	$ 280
INDIRECT COSTS:			
Water Department/ Other Fees	$1,800	$ 0	$ 1,800
Permits	$ 0	$ 200	$ 200
Plan Reviews/ Inspections	$ 0	$ 81	$ 81
NET COSTS OF SPRINKLER SYSTEM	$9,319	$ 6607	$15,926
Gen. Contractors Mark-Up @ 15%			$ 2,389
Wash. State Sales Tax @ 6.1%			$ 1,483
TOTAL COST			$19,798
COST PER SQ. FT.	$1.41	$1.00	$2.73
COST PER UNIT			$1,980

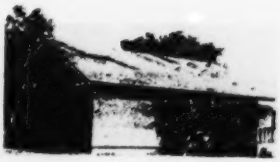
COMMUNITY: Austin, Texas

CONTACT: Steve Cook
Austin Fire Department
517 S. Pleasant Valley
Austin, TX 78741
(512) 448-2455

Laurie Born
Housing Division
Housing & Community Services Department
City of Austin
1622 E. Riverside Drive
Austin, TX 78767
(512) 442-7200

BUILDING LOCATIONS: 2601 Sol Wilson Avenue,
3501 Pennsylvania Avenue
Austin, TX

BUILDING OWNER: Mike Leff
8403 Research Blvd.
Austin, TX
(512) 837-6350



TENANTS: Low and moderate-income families.

BUILDING DESCRIPTION: Two duplexes, wood frame construction, 1,280 and 1,360 square feet, circa 1960.

SPRINKLER SYSTEM: NFPA 13D Residential Sprinkler System.

SYSTEM DESIGN & INSTALLATION CONTRACTOR: Sandberg Fire Protection of Texas, Inc.
201 Industrial Boulevard
Austin, TX 78745
Contact: Mike Parker

STATUS: System operational, rehabilitation complete, buildings reoccupied.

TABLE 1-3
SPRINKLER SYSTEM COSTS

2601 SOL WILSON AVENUE DUPLEX	
Design (includes plan review by fire department)	$1,100.00
Installation	$1,600.00
Materials	$ 710.00
Increased water service (new 1" main)	$1,800.00
TOTAL	$5,210.00
COST PER SQUARE FOOT	$ 3.80
3501 PENNSYLVANIA AVENUE DUPLEX	
Design (includes plan review by fire department)	$1,100.00
Installation (includes equipment)	$1,900.00
Materials	$ 703.00
Combining water service lines	$ 700.00
TOTAL	$4,403.00
COST PER SQUARE FOOT	$ 3.44
TOTAL COST FOR TWO DUPLEXES	$9,613.00
AVERAGE COST PER UNIT	$2,403.25
AVERAGE COST PER SQUARE FOOT	$ 3.62

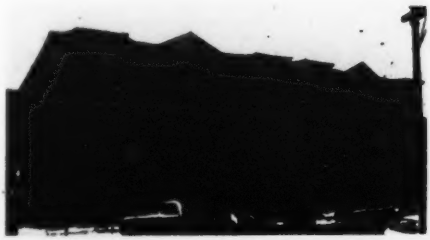
SOURCE: Sandberg Fire Protection Inc., National Research Center

BEST COPY AVAILABLE

OMMUNITY: Boston, Massachusetts

CONTACT: Chief Paul Cook
Boston Fire Department
115 Southhampton Street
Boston, MA 02118
(617) 442-8000

Barry Berman
Development Specialist
Public Facilities Dept
City of Boston
15 Beacon Street,
9th Floor
Boston, MA 02108
(617) 720-4300



BUILDING LOCATION: 777-779 Huntington Ave
Mission Hill
Boston, MA

BLDG. OWNER & DEVELOPER: Hugh Kelly
KVC Associates
1 Fenwood Road
Boston, MA 02115
(617) 731-0165

TENANTS: Low and moderate-income families.

BUILDING DESCRIPT.: 22-unit, masonry building, three-stories with commercial space on first floor. 21,600 square feet, circa 1900.

SPRINKLER SYSTEM: Modified NFPA 13D system, four sprinkler head design with polybutylene lines. One inlet control manifold for each of the two sections of the building.

SYSTEM DESIGN & INSTALL.: Fire Protection Plus, Inc.
33 Thelma Road
Framingham, MA 01701
Contact: Tom Rinoldo
(617) 875-0722

STATUS: System operational, rehabilitation completed, building reoccupied.

TABLE 9-8
SPRINKLER SYSTEM COSTS

WORK CATEGORY	MATERIALS	LABOR	TOTAL
SYSTEM DESIGN	$ 0	$ 2,250	$ 2,250
SYSTEM INSTALLATION (With Discounts)	$ 8,100	$12,150	$20,250
SYSTEM INSTALLATION (National Research Center Estimate w/o Discounts)	$13,060	$16,090	$30,150
INCREASED WATER SERVICE	NA	NA	$ 5,000
UPGRADED CAPABILITY OF FIRE PANEL	NA	NA	$ 2,000
WITH DISCOUNTS			
TOTAL			$29,500
PER SQUARE FOOT			$ 1.37
PER UNIT INCLUDING COMMERCIAL			$ 1,283
PER RESIDENTIAL UNIT			$ 1,341
WITHOUT DISCOUNT			
TOTAL			$39,400
PER SQUARE FOOT			$ 1.82
PER UNIT INCLUDING COMMERCIAL			$ 1,713
PER RESIDENTIAL UNIT			$ 1,791

Source: Fire Protection Plus Inc., National Research Center

BEST COPY AVAILABLE

COMMUNITY: Harrisburg, Pennsylvania

CONTACT: Donald Konkle
Harrisburg Fire Dept
123 Walnut Street
Harrisburg, PA 17101
(717) 255-6464

Eric Hinderliter
Dept of Community and
Economic Development
10 N. Market Square
Harrisburg, PA 17101
(717) 255-6480

BUILDING LOCATION: 1317-19 Derry Street
Allison Hill
Harrisburg, PA

BUILDING OWNER & DEVELOPER: Richard and Michael Kushner
Inner City Developers, Inc.
919 Susquehanna Street
Harrisburg, PA 17102
(717) 236-6620

TENANTS: Low and moderate-income families.

BUILDING DESCRIPT.: Three-story masonry building, wood-frame interior, six apartments, first floor commercial. 7,100 square feet, circa 1900.

SPRINKLER SYSTEM: Modified NFPA 13D.

SYSTEM DESIGN: NAHB National Research Center.

SYSTEM INSTALL.: Building owner - rehabilitation contractor.

STATUS: System installed,
building undergoing rehabilitation.

TABLE 3-3
SPRINKLER SYSTEM COSTS

Design*	$1,750
Materials pipe, fittings, and hangers (wholesale)	$ 1,008
sprinkler heads (wholesale)	$ 802
control manifold (including double check valve, pressure gauge, relief valve, flow switch, and assorted fittings) (wholesale)	$ 350
ESTIMATED MATERIAL TOTAL (wholesale)	$ 2,760
ESTIMATED MATERIAL TOTAL (30 % markup for retail)	$ 3,590
Site Labor (approximately 180 hours)	$ 7,000
Building expense to install sprinklers (patch floors walls and ceilings)	$ 1,500
WITHOUT MATERIAL COSTS	
TOTAL	$10,350
COST PER SQUARE FOOT	$ 1.44
COST PER UNIT INCL. COMMERCIAL AREA	$1,464
COST PER RESIDENTIAL UNIT	$1,708
WITH WHOLESALE MATERIAL COSTS	
TOTAL	$13,010
COST PER SQUARE FOOT	$ 1.83
COST PER UNIT INCL. COMMERCIAL AREA	$1,858
COST PER RESIDENTIAL UNIT (wholesale material costs)	$3,108
WITH ESTIMATED RETAIL MATERIAL COSTS	
TOTAL	$13,838
COST PER SQUARE FOOT	$ 1.95
COST PER UNIT INCL. COMMERCIAL AREA	$1,977
COST PER RESIDENTIAL UNIT	$2,306

* Done by National Research Center

BEST COPY AVAILABLE

COMMUNITY: Prince George's County, Maryland

CONTACT: David M. Banwarth, P.E.
Division Manager
Engineering Division
Bureau of Fire Prevention and Investigations
14741 Gov. Oden Bowie Drive
Room 1155
Upper Marlboro, MD 20772
(301) 952-5538

Emelda Johnson-Heller and Leroy Brown
Department of Housing
Community Development
Landover Mall East
Suite 300
Landover, MD 20785
(301) 386-5073

BUILDING LOCATION: The Lodge Apartments
5345-53 Sheriff Road
Capitol Heights, MD

BUILDING OWNER: Wayne A. Bowie
W.A. Bowie & Sons, Inc.
4700 Webster Street
Bladensburg, MD 20710
(301) 779-5666

TENANTS: Low and moderate-income families.

BUILDING DESCRIPT.: 15-unit, three-story, masonry building, 16,660 square feet, circa 1965.

SPRINKLER SYSTEM: Modified NFPA 13D system, 2 head design.

SPRINKLER DESIGN: NAHB National Research Center.

SPRINKLER INSTALL.: Livingston Fire Protection
5150 Lawrence Place
Hyattsville, MD 20781
Contact: Frank Livingston
(301) 779-4466

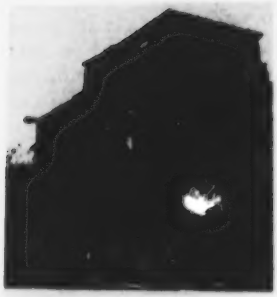
STATUS: System operational, building undergoing rehabilitation, partially reoccupied.

TABLE 4-3
SPRINKLER SYSTEM COSTS

	LABOR	MATERIAL	TOTAL
Design	$ 1,750.00*	0	$ 1,750.00
Sprinkler Installation	$ 8,260.00	$ 5,740.00	$14,000.00
Soffits to Conceal Pipe	$ 3,098.00	$ 2,152.00	$ 5,250.00
Preparatory Drilling and Layout	$ 2,520.00	0	$ 2,520.00
Plumbing Hook-up to Existing Water Supply	$ 826.00	$ 574.00	$ 1,400.00
Electrical Connection to Existing Alarms	$ 63.00	$ 177.00	$ 240.00
TOTAL (incl. design)	$16,517.00	$ 8,643.00	$25,160.00
COST PER SQUARE FOOT	$ 0.99	$ 0.52	$ 1.51
COST PER LIVING UNIT	$ 1,101.00	$ 576.00	$ 1,677.00

* Done by the National Research Center, not funded by grant to Prince George's County

BEST COPY AVAILABLE



COMMUNITY: St. Louis, Missouri

CONTACT: Chief George F. Jeakerson
St. Louis Fire Department
City Hall, Room 418
1200 Market Street (at Tucker)
St. Louis, MO 63103
(314) 622-4194

Don Bollinger
Community Development Agency
City of St. Louis
411 N. Tenth Street
St. Louis, MO 63101
(314) 622-3400

BUILDING LOCATION: 2102 Lafayette Ave.
Lafayette Park
St. Louis, MO

BUILDING OWNER & DEVELOPER: Stephen E. Bayer
The Pride Organization
3606 Botanical
St. Louis, MO 63110
(314) 776-2400

TENANTS: Moderate income families.

BUILDING DESCRIPTION: Masonry, three stories plus basement, 4-units, 8,000 square feet, circa 1880-1890.

SPRINKLER SYSTEM: Modified NFPA 13D.

SYSTEM DESIGN & INSTALLATION CONTRACTOR: Grinnell Fire Protection Systems Company
8200 Exchange Way
St. Louis, MO 63144
Contact: David Gagan
(314) 968-4950

STATUS: System operational, rehabilitation complete, building reoccupied.

TABLE 5-3

SPRINKLER SYSTEM COSTS FOR 2102 LAFAYETTE AVENUE

Engineering and Design	$ 1,500
Material	$ 4,900
Labor	$ 9,168
Water Service Upgrade for Sprinkler Portion of New Water Service	$ 1,500
TOTAL	$17,068
COST PER SQUARE FOOT	$2.13
COST PER LIVING UNIT	$ 4,267

[“Residential Fire Sprinklers Retrofit Demonstration Project”, Phase I, Multifamily Structures, final report, Sept. 1989, and Phase II, Single-Family Structures Case Studies, final report, Sept. 1990, publications of the United States Fire Administration, are retained in committee files.]

BEST COPY AVAILABLE

Mr. WALL. It is, roughly, in new construction, $1.50 to $1.75 per square foot, and in retrofit, somewhere between $2.50 to $3.50 per square foot. The comparison people like to make is that in new construction the cost of carpeting your house costs more than the protection of the home.

I was looking for housing recently. I played a little game with the realtors. I asked them if sprinkler systems were available.

In almost each case the answer was yes, but they meant the sprinkler system was for the lawn. You may spend that money to protect your lawn from the July burning, but not your house from the December burning.

Mr. MARTINEZ. Ms. Feely, on pages nine and ten of your testimony, you outlined some preventative measures that you can take for training and educating young people, what to do in the case of a fire and families.

Do you have that information in a brochure form?

Ms. FEELY. Surely.

Mr. MARTINEZ. Would you supply one for the committee for the record and supply me several for my office?

Ms. FEELY. Absolutely, we will be happy to.

Mr. MARTINEZ. My room number is 2446 Rayburn.

Ms. FEELY. I think we will be able to find you.

Mr. MARTINEZ. Mr. Weldon?

Mr. WELDON. Mr. Bilirakis asked for information on statistics involving properties where the residents are in excess of 65 years of age, also, if you have that.

Mr. WALL. All right.

Mr. WELDON. I think we ought to make a distinction for the record that there is a very real difference between a "smoke detector" and what is commonly called "fire" or "heat" detectors.

There were some companies selling heat detectors in a very unscrupulous manner. People were bilked into thinking they had early warning. We ought to make the distinction between a "smoke detector" and a "heat detector" for the record.

Mr. WALL. I think that is important. It is a hot issue right now. Pardon the pun.

Mr. MARTINEZ. Ms. Feely, could you send the select committee enough brochures to pass out to the committee members.

Ms. FEELY. We would be happy to.

[The information was distributed to members of the Select Committee on Children, Youth, and Families.]

Mr. MARTINEZ. Thank you very much.

On behalf of the Chairwoman, Mrs. Schroeder, I know she is very grateful for your testimony here today, as well as all the members of the committee. I think it is important that we hear from you and hear your opinions.

Be assured that we are moving in the same direction that you are, to provide all the safety we can for the children and families in our country. We are adjourned.

[Whereupon, at 12:15 p.m., the hearing was adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF BRIAN KLUGH, LIEUTENANT, ASSISTANT FIRE MARSHAL, LANCASTER BUREAU OF FIRE, LANCASTER, PA

THE PROBLEM

Our children are at risk from fire. Each year thousands of children die or are permanently scared, either emotionally or through disfigurement. National Fire Protection Association figures show that children, five or younger have twice the risk of loosing their lives in a home fire.

The terrible truth is that many of these losses, many of our tears could be prevented. The fire service, our government and the citizenry we serve must understand the problems and be aware of what can be done to prevent the needless loss of young lives and potential.

Our children are at risk from fire, the reasons are many, and varied. Children are affected and impacted by other peoples behavior. Behavior not under their control. Certainly an infant can't be expected to assure the door to her bedroom is closed to keep out smoke and heat. Preschoolers have no control over who installs and checks the smoke detectors, who might leave cooking unattended, or matches and lighters within easy reach.

The children, families, firefighters, all of us suffer the consequences of uncontrolled fire and lack of planning for home escape.

Young children may not be able to recognize or be able to react to danger. Children's skin is damaged so easily that hot water from a tap, hot liquid from a cup or a cooking vessel they reach for and spill can cause burns. Burns can come from open flames, like candles flickering for the curious touch or from heating devices that may be inappropriate for use around kids or unattended.

Children's sleepwear is often passed along to others when it's outgrown. Sleepwear is used and worn long after any fire retardant that may have been there is laundered away.

Recently our organization taped a public service message on children's fire safety. For this spot, I used an old sleeper that my daughter had worn and

outgrown. When a flame was put to this, it burned horribly fast. I was terrified to see how quickly this tiny shape, one that had once clothed the most precious person in my world, was consumed by flame.

All of our homes are full of items that will burn. We would be significantly safer from fire if we emptied every room in our houses; no fuel no fire. Any reasonable person would laugh at such a thought, just as a reasonable person would cringe at the thought of keeping something that burns like gasoline in the house.

Foam furniture padding burns like gasoline. It ignites easily, burns hot, and produces volumes of poisonous gases.

Our municipality recently suffered the loss of a family of five, four of them were children, when a foam couch on their porch was ignited.

The cloth tag warning people about the hazards of this material did little to protect the lives of these children.

Tobacco use impacts fire loss and children's safety in several ways. Cigarettes are often what starts a fire on upholstered furniture. A dropped cigarette can smolder for hours, with tragic results.

To light that pipe or cigarette, matches and lighters are used. These items are fascinating to a young child.

Children want to imitate adult behavior. Lighters and matches are dangerous when left within reach of a child. Curiosity does nothing to a cat, it does take the lives of children who light matches and lighters out of curiosity.

Often our children are given responsibility for younger relatives or neighbors. Kids are watching kids. We need to recognize that family circumstances, working mothers, the need for baby-sitters and other factors contribute to this trend.

Children need to know how to react in an emergency. They need to manage household systems to prevent a fire from starting. These children need to develop skills necessary to prevent harm to the younger ones they are watching. They need to know how to escape, how and where to safely summon aid.

Most people have no idea what a fire in their home would be like. Movies and television portray fires as brightly lit scenes with heroes covering their faces against smoke and always making the rescue.

In reality, people are overcome in their sleep. They open doors and spread fire through the house. People wrongly think they will smell smoke when they're asleep, get to their kids, escape together and go back in for the family dog. People mistakenly believe they have time in a fire or that the

building itself must burn to be a hazard to their families. All it takes to kill is a handful of minutes and one over stuffed chair.

How often does a motion picture or television production depict an entire automatic sprinkler system discharging simultaneously when someone lights a cigarette. Good for a laugh but ask anyone in the fire service how often that misconception surfaces in discussions about sprinklers with the public.

Not all media misrepresents fire safety. Several quality public service efforts educate the populace. A thank-you should also go to the talents involved with the television program "Major Dad". This program shows fire safety and alerting devices casually as part of the home and work environment.

WHAT WE DO

The City of Lancaster, Pa. has a career Fire Bureau with 25 suppression personnel on duty at all times. The City has six persons assigned full time to the Fire Marshal's Office.

We have several public Safety and Education projects that specifically address children and family issues.

Stop, Drop and Roll, Stay Low in Smoke, How to Summon Emergency Aid, Practicing a Home Escape Plan, and other essential behaviors are discussed and actually practiced as part of our program delivered in the Lancaster Public School System. Our approach is to teach, and let children perform, the behaviors that could save their lives in a fire. Planning is underway to involve all on duty suppression personnel in an expanded school safety program.

Recently we worked with the local Head Start to initiate the N.F.P.A. "Learn not to Burn" pre-school curriculum. This excellent program reinforces several safety behaviors through a series of games, activities and songs. Other pre-school and day care providers will participate this coming school year.

Head Start and several associated agencies are working with us to include fire safety issues in home visit programs. The project includes prevention and escape information as well as fire code items like smoke detector use and maintenance. Families are encouraged to deal with any code deficiencies that may exist by confronting the situation with the responsible

party.

Several organizations, including the Y.W.C.A., invite us to participate in their parenting skills classes. We offer instruction and advice on home safety issues, and specifically how it effects children and families. These classes are for people who have, in the past, demonstrated non-adapting behavior.

New parents are given fire safety information in a cooperative effort with a local hospital's pre-natal program.

The City Fire Service facilitated the development of a home fire escape demonstration trailer. This towed vehicle features room mock-ups and uses theatrical smoke to mimic fire conditions. Children safely experience some of the obstacles and behaviors involved in exiting during a fire. A county-wide fire service organization presently delivers the program. Last year 10,000 persons participated; in 1990 all City School Children experienced the Smoke Trailer Program.

Suburban Cable of Lancaster County, a local Cable Television provider, produces and airs a series of fire and home safety messages. These segments are titled "Smoke Break" are shown twice a week to 70,000 subscriber homes.

RECOMMENDATIONS

To reduce children's risk of harm by fire we need to educate children and their parents on how to prevent fires and how to escape fires that do occur.

Families need to know the importance of an early warning device. Smoke Detectors, properly installed and maintained, can double a persons chances of surviving a fire. Smoke detectors should be encouraged and required in all dwelling units. Children deserve this chance.

We need to adopt and enforce legislation and code provisions to remove unnecessary risk from a child's environment.

The last specific action should be taken locally and nationally to

encourage the use of residential sprinkler systems. Builders, the public and the fire service should be aware of the benefits of this life saving technology. Operation Life Safety, with the International Association of Fire Chiefs are actively seeking to educate people on the benefits and potential cost savings of these devices.

There is a need to limit the hazard presented by common foam filled furnishings. A home is no place for something that burns with that kind of devastation.

We cannot afford focusing our resources reactively. We have the best fire suppression forces in the world, bar none. Yet we continue to loose lives and resources unnecessarily to fire. The need is there to focus our attention and resources on the problem before a tragedy occurs. Fire service personnel need the resources for the multiple roles we assume, suppression, education, prevention and code enforcement.

U.S. CONSUMER PRODUCT SAFETY COMMISSION

WASHINGTON, D.C. 20207

Executive Summary of Cigarette Lighter Project

The Consumer Product Safety Commission staff recommends that the Commission propose a standard, under the Consumer Product Safety Act, to require disposable and novelty lighters to be child-resistant.

Updated fire loss data for 1987-1989 show an estimated annual average of 5,800 residential structural fires, 170 deaths, and 1,190 injuries resulted from children under age five playing with lighters. The risk of death is at least twice as high for lighter fires involving child-play as for residential structural fires in general.

In May 1991, the Commission voted to postpone a decision on whether to propose a standard until after receipt of the Toronto retest results. The Commission indicated the need for further testing in Toronto to assure the reproducibility of the test protocol in the draft proposed standard.

The statistical analysis of the verification testing, including the Toronto retest, confirm the reproducibility of the test protocol. The staff changed the test protocol as indicated by the analysis of the verification testing. These changes include:

* reducing the number of children tested by an individual tester from 30 percent to 20 percent of the test panel with five testers or 17 percent of the test panel with six testers; and

* increasing the test panel from 50 to 100 children to further reduce the variability in the test results.

The test protocol requires the testers to provide three demonstrations of lighter operation to the children after the first five minutes. The definition of successful operation is one operation of the surrogate signal of any duration within the ten minute test.

The baseline testing results on four disposable non-child-resistant lighters, weighted to reflect product usage, show that lighters now on the market are about 50 percent child-resistant. The child-resistant effectiveness for three prototype child-resistant lighters exceeds 95 percent. These data show the feasibility of designing lighters that are significantly more difficult for children under five to operate.

The draft proposed standard specifies an acceptance criterion of 85 percent, the highest acceptance criterion the staff considers commercially feasible for most firms. The draft notice of proposed rulemaking specifically solicits comments on the potential economic impact of requiring a 90 percent acceptance criterion. The scope includes disposable lighters (all non-refillable lighters and inexpensive refillable lighters), and all novelty lighters (lighters that resemble any other object in physical form or function).

The draft proposed standard contains anti-stockpiling provisions to limit the production or importation of non-complying lighters between the publication of a final rule and its effective date. The effective date is 12 months from the date of publication of a final rule to minimize the economic impact of the proposed rule on small importers.

A mandatory standard is expected to prevent 85 to 120 of the 170 deaths each year associated with children under five playing with lighters. The estimated annual benefits of the draft proposed standard are $210-$290 million, comprised of reductions in deaths, injuries and property damage. The estimated annual costs are $95 million. Therefore, the estimated net benefits to consumers are a substantial $115-$195 million each year.

○

60-327 (132)

ISBN 0-16-039722-7